fotonik™

''Creates Intelligent Photons''

# Fotonik Lighting Solutions
# LED Modules

2021

**Fotonik Teknoloji A. Ş., profesyonel teknik aydınlatma ve medikal aydınlatma teknolojileri üzerine yoğunlaşmıştır. Şirket politikamız; müşterilerinin görsel konforunu, çevresel uygunluğunu, iş güvenliği ve iş gücü verimliliğini üst düzeye çıkarırken, satın alma, bakım ve enerji maliyetlerini en aza indirmek için satış öncesi ve sonrası destekle birlikte son teknoloji aydınlatma sistemlerini tedarik etmektir.**

**Aydınlatma teknolojisindeki gelişmeler, ışığın sayılarla açıklanamayacağını aynı zamanda mekanlarda modern bir algının da oluşturulması gerektiğini göstermektedir. Mimarideki dördüncü boyut, uzmanlar için doğru aydınlatma armatürüyle çalışmayı zorunlu kılmaktadır. Fotonik Teknoloji Aydınlatma Labaratuvarları yüksek kaliteli aydınlatma armatürlerinin fotometrik ölçümlerinin yapılması ve ürün güvenilirlik testlerinin yapılabilmesi için donatılmıştır.**

**Konusunda uzman satış öncesi ve sonrası teknik ekibimizle, projelerinizi uluslararası standartlara uygun olarak gerçekleştirerek müşterilerimize enerji verimliliği, güvenliği ve konforu yüksek aynı zamanda da yatırım maliyetleri düşük aydınlatma tasarımları yapıyoruz.**

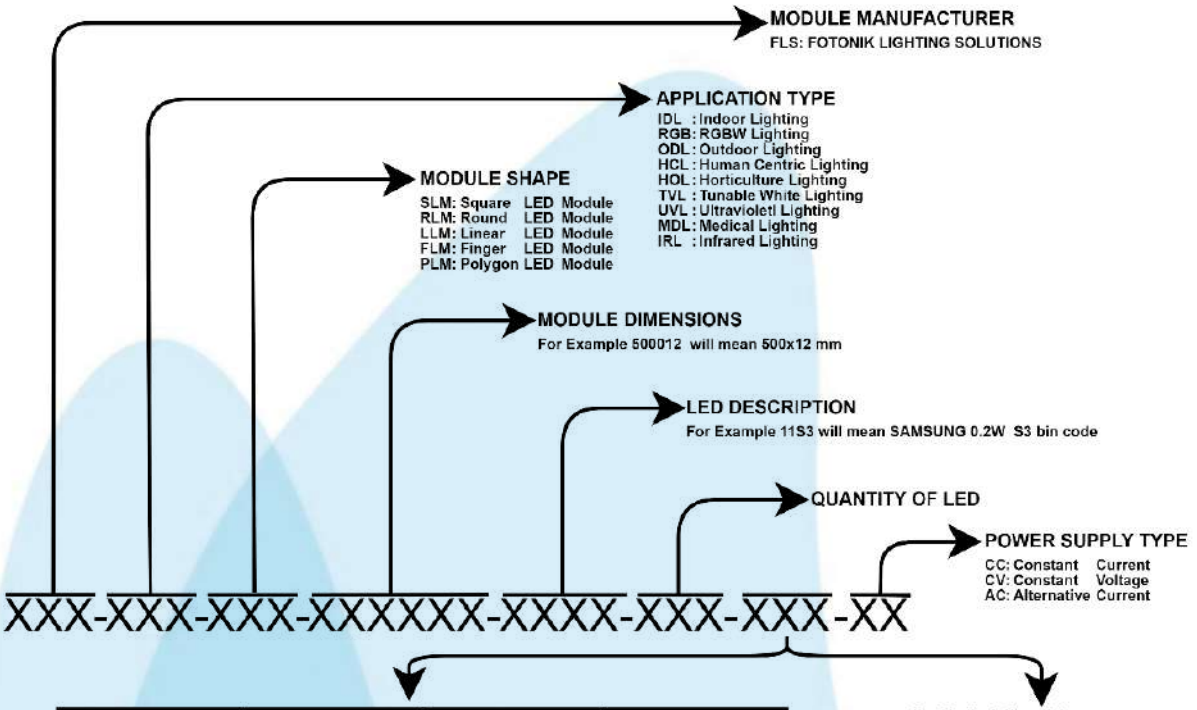
*Fotonik Technology Co. is concentrated on professional technical lighting and medical lighting technologies. Our company policy is to supply state of art products, together with professional pre/after-sales support so as to minimize setup, energy and maintenance costs, while maximizing visual comfort, man power efficiency, safety and environmental conformity.*

*Advances in lighting technology shows that the light cannot be explained by numbers, but also perception should be created. The fourth dimension in architecture makes essential to work with right lighting luminaries for experts. Fotonik Technology Lighting Laboratories are equipped to clear the way for designing of high quality lighting luminaires as well as the use of product safety characteristics.*

*Fotonik Technology's expert pre- and after-sales technical team evaluate your projects according to the international standards and design environment friendly, energy efficient, safe, comfortable lighting with low investment costs.*

# CONTENTS

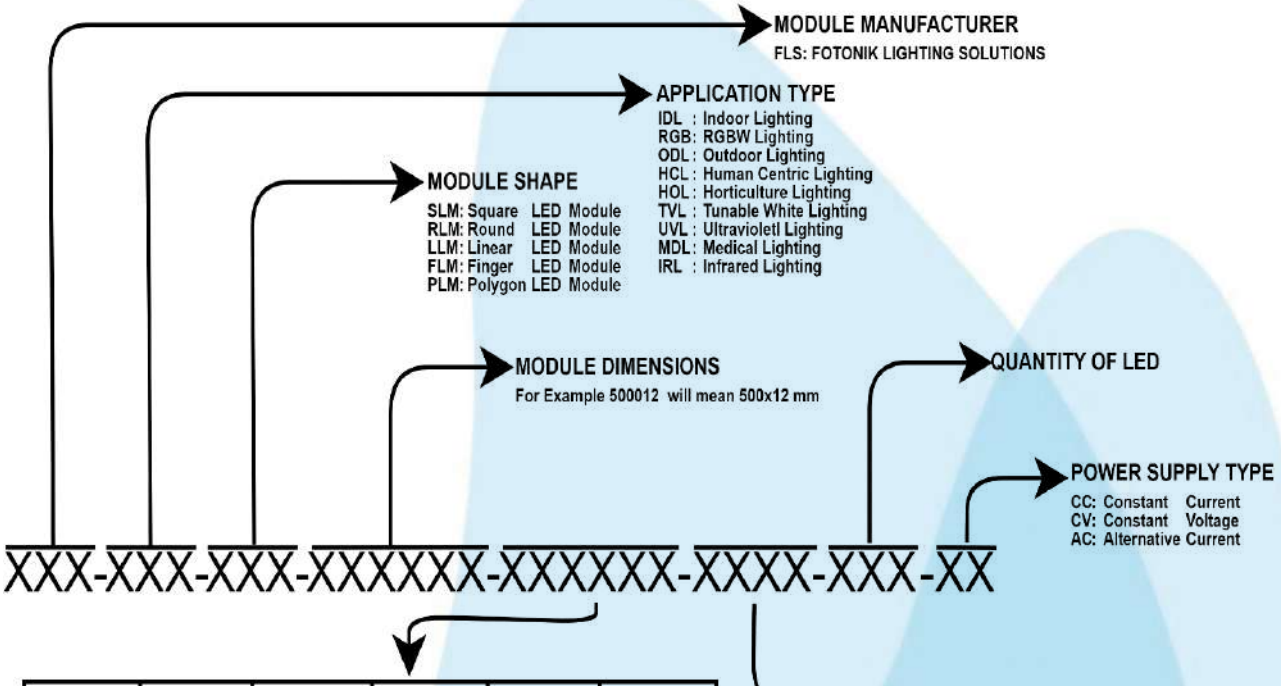
# Code Description of LED Modules



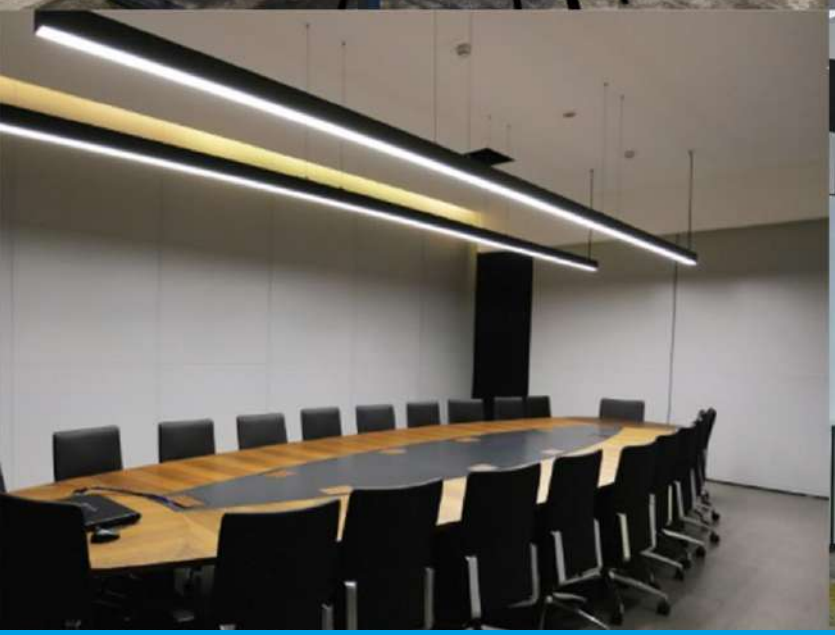

| CRI | CODE | CCT | CODE |
|---|---|---|---|
| 70 CRI | 7 | 2700 °K | 27 |
| 80 CRI | 8 | 3000 °K | 30 |
| 90 CRI | 9 | 4000°K | 40 |
| 93 CRI | N | 5000 °K | 50 |
| 94 CRI | O | 6500°K | 60 |
| 95 CRI | P | TW | Tunable White |
| 97 CRI | R | CL | Circadian Light |
| 98 CRI | S | HC | Horticulture |
| 100 CRI | T | | |
| Fish | F | | |
| Meat | M | | |
| Bakery | B | | |
| Vegetable | V | | |

RoHS compliant LVD EMC CE

# Code Description of PCBs

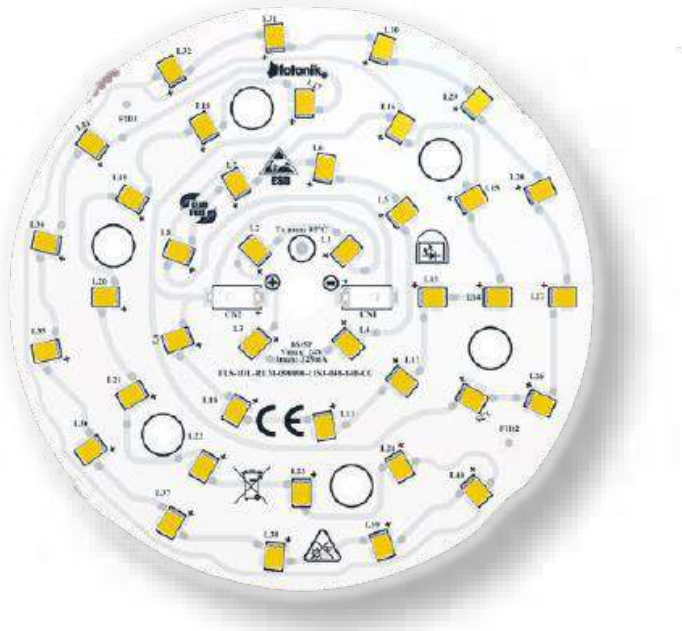


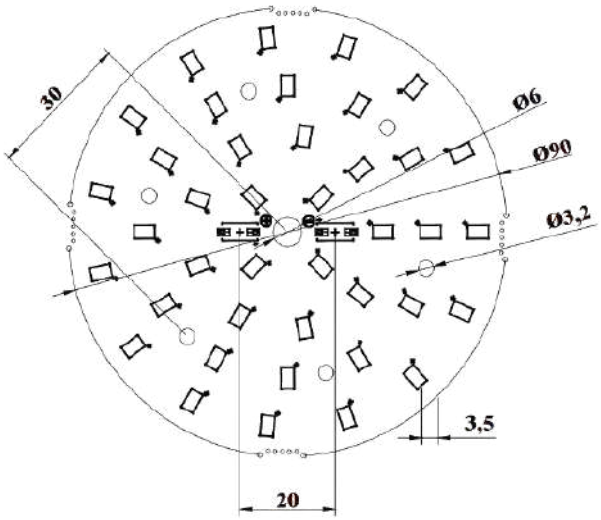

| Pb free | Layer Count | PCB Material | Code | Thickness | Code |
|---|---|---|---|---|---|
| G=Green | 1 | CEM1 | C1 | 0.8//2.0mm | 12 |
| P=Leaded | 2 | CEM3 | C3 | 0.8//2.0mm | 16 |
| | 1 | FR4 | F4 | 0.8//2.0mm | 8 |
| | 1 | MCPCB | MC | 0.8//2.0mm | 20 |
| | 1 | CRPCB | CR | 0.8//2.0mm | 09 |
| | 1 | IMSPCB | IM | 0.8//2.0mm | 15 |



# INDOOR LIGHTING SOLUTIONS

# ROUND LED MODULE






## FLS-IDL-RLM-090090-11S3-040-840-CC

### SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 8 Series 5 Parallel.
- Luminous flux range from 916 lm to 2754 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**

**FLS-IDL-RLM-090090-G1MC16-2835-040-CC**

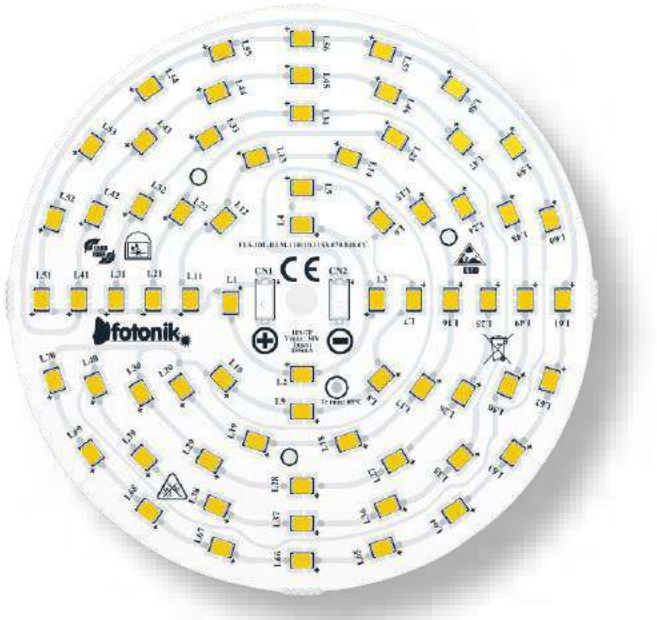
| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 40 | 40 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 24,8 | 24 |
| Module Operating Current (mA) | 250 | 750 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 5.9 | 17,3 |
| Module Light Output (lm) | 916 | 2754 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 90 mm x 90 mm | |
| Compatible Driver | 8W–250mA | 20W–750mA |

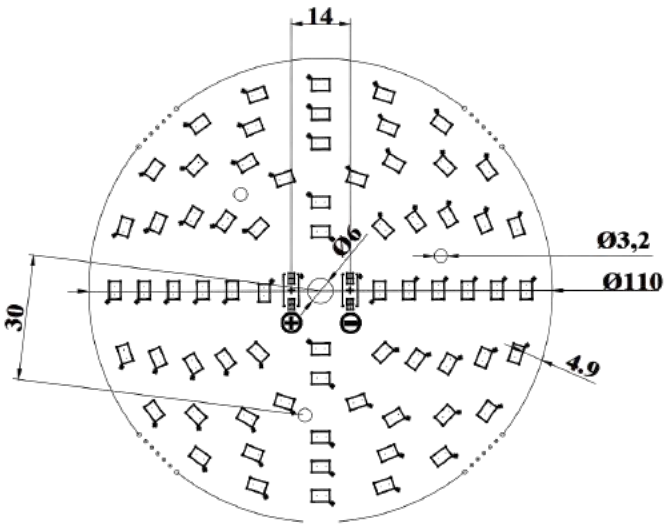
*Lumens tolerance of ± 10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |

# ROUND LED MODULE






## FLS-IDL-RLM-110110-11S3-070-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 10 Series 7 Parallel.
- Luminous flux range from 1602 lm to 4819 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-IDL-RLM-110110-G1MC16-2835-070-CC**

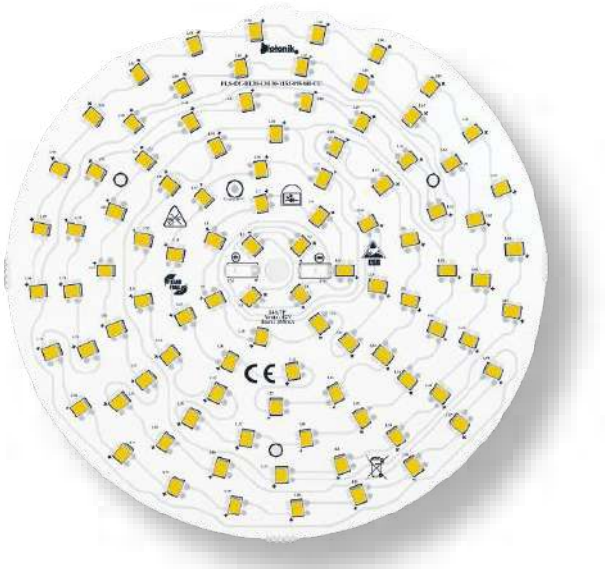
| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 70 | 70 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 31 | 30 |
| Module Operating Current (mA) | 350 | 1050 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 10,3 | 30,3 |
| Module Light Output (lm) | 1602 | 4819 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 110mm x 110mm | |
| Compatible Driver | 12W–350mA | 35W–1050mA |

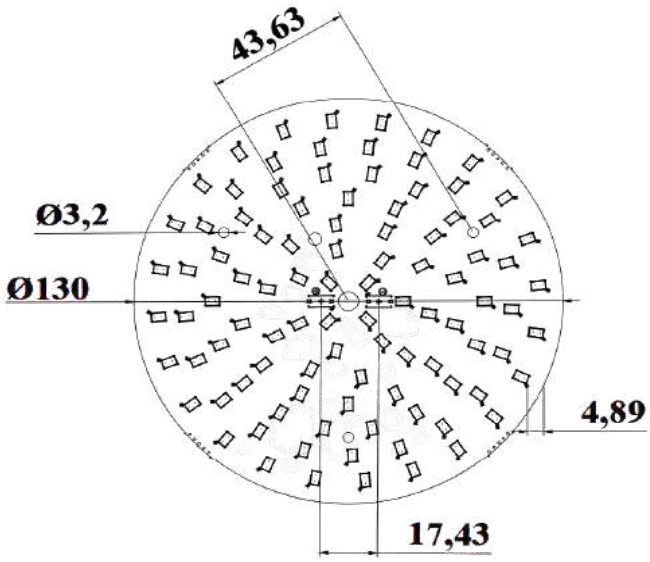
*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |

# ROUND LED MODULE






## FLS-IDL-RLM-130130-11S3-098-840-CC

### SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 14 Series 7 Parallel.
- Luminous flux range from 2243 lm to 6747 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

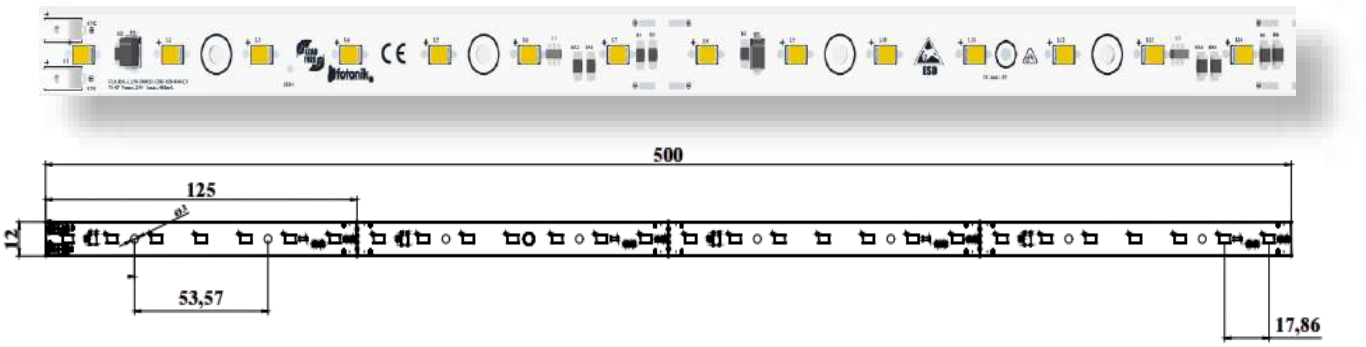
**You may tell us the code below for ordering only PCB**
**FLS-IDL-RLM-130130-G1MC16-2835-098-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 98 | 98 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 43,4 | 42 |
| Module Operating Current (mA) | 350 | 1050 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 14,5 | 42,4 |
| Module Light Output (lm) | 2243 | 6747 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 130mm x 130mm | |
| Compatible Driver | 16W–350mA | 50W–1050mA |

*Lumens tolerance of ± 10% on intensity measurements.*

SAMSUNG LED'se inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-500012-12RJ-028-840-CV

## SPECIFICATIONS

- Can be driving with constant current or constant voltage according to request.
- Default driving method is constant voltage input as 24V
- Linear White LED module CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 7 Series 4 Parallel.
- Luminous flux range from 641 lm to 1928 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 28 | 28 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 24 | 24 |
| Module Operating Current (mA) | 200 | 500 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 4,1 | 12,1 |
| Module Light Output (lm) | 641 | 1928 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 500mm x 12mm | |
| Compatible Driver | Constant Voltage (24v) | |

*Lumens tolerance of ±10% on intensity measurements.*

## STANDARTS

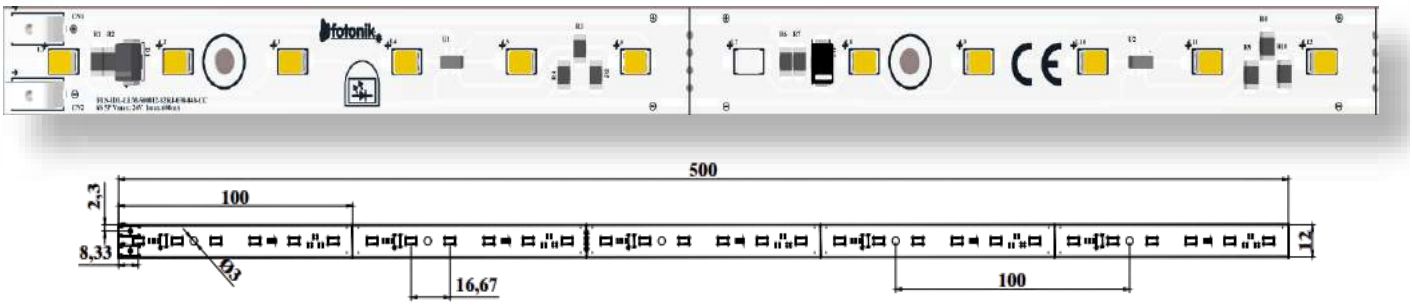
**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**

**FLS-IDL-LLM-500012-G1C116-2835-035-CV**

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-500012-12RJ-030-840-CV

## SPECIFICATIONS

- Can be driving with constant current or constant voltage according to request.
- Default driving method is constant voltage input as 24V
- Linear White LED module CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 6 Series 5 Parallel.
- Luminous flux range from 687 lm to 2065 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 30 | 30 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 24 | 24 |
| Module Operating Current (mA) | 250 | 750 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 4.4 | 13 |
| Module Light Output (lm) | 687 | 2065 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 500mm x 12mm | |
| Compatible Driver | Constant Voltage (24v) | |

*Lumens tolerance of ±10% on intensity measurements.*

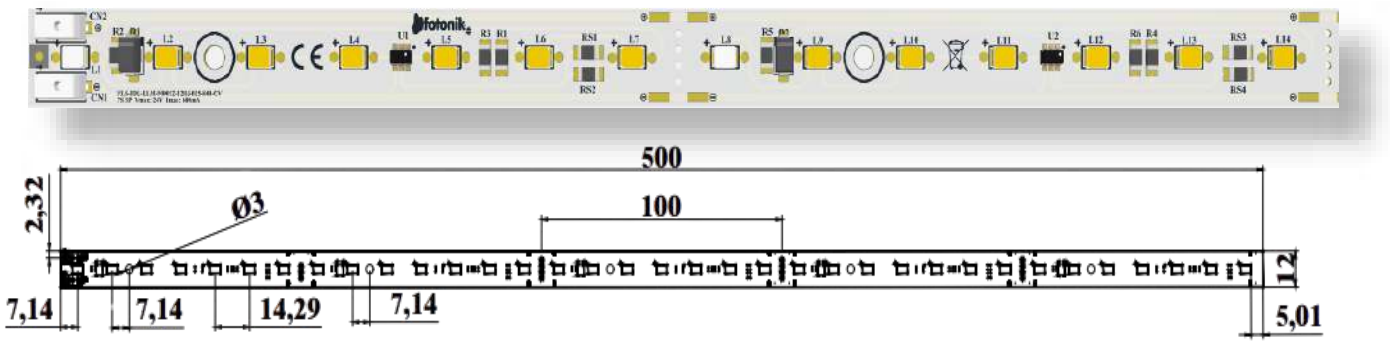
## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering**
**FLS-IDL-LLM-500012-G1C116-2835-030-CV**

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-500012-12RJ-035-840-CV SPECIFICATIONS

- Can be driving with constant current or constant voltage according to request.
- Default driving method is constant voltage input as 24V
- Linear White LED module CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 7 Series 5 Parallel.
- Luminous flux range from 801 lm to 2410 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 35 | 35 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 24 | 24 |
| Module Operating Current (mA) | 250 | 750 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 5.2 | 15.1 |
| Module Light Output (lm) | 801 | 2410 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 500mm x 12mm | |
| Compatible Driver | Constant Voltage (24v) | |

*Lumens tolerance of ±10% on intensity measurements.*

## STANDARTS

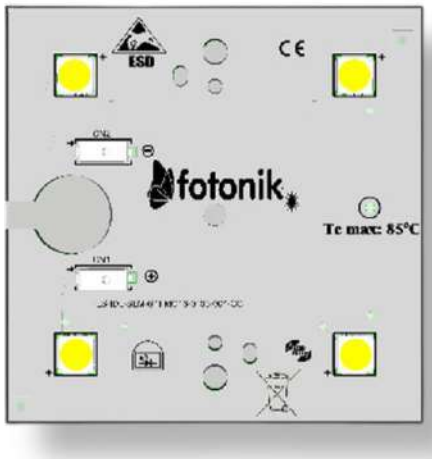
**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

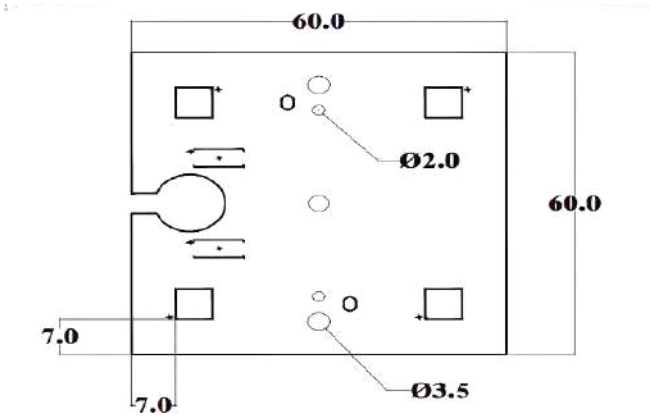
**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-500012-G1C116-2835-035-CV**

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |

# SQUARE LED MODULE




## FLS-IDL-SLM-060060-15A2-004-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 4 Series 1 Parallel.
- Luminous flux range from 2659 lm
- Efficacy of the module up to 155 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

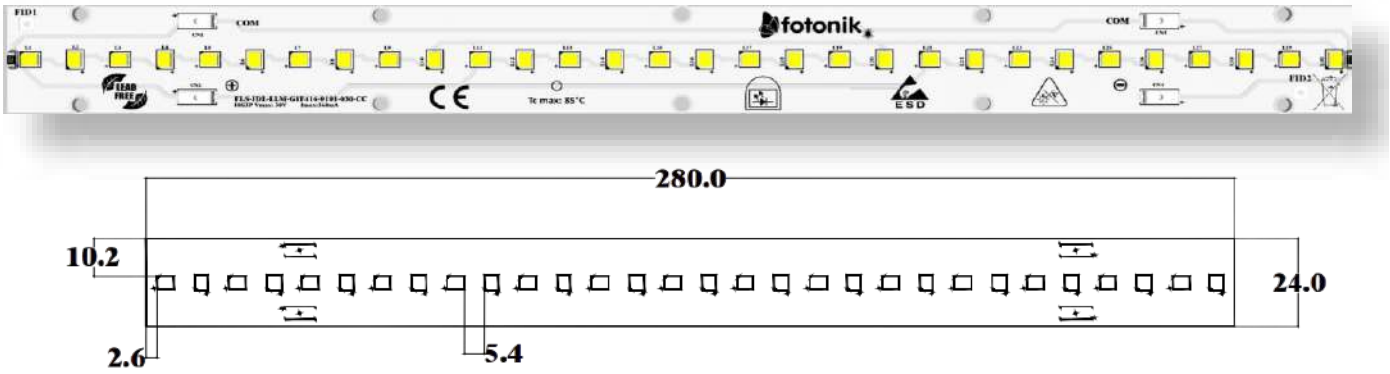
**You may tell us the code below for ordering only PCB**
**FLS-IDL-SLM-060060-G1MC16-5050-004-CC**

| Module Specifications | |
|---|---|
| LED Type | LH502C/A2 |
| Compatible Lens | LEDIL Daisy 2x2 |
| LED Quantity | 4 |
| Correlated Color Temperature (CCT) | 4000 °K |
| Color Rendering Index (CRI) | 70+ |
| Module Operating Voltage (V) | 24.64 |
| Module Operating Current (mA) | 700 |
| Branch Operating Current (mA) | 700 |
| Module Power (W) | 17.2 |
| Module Light Output (lm) | 2649 |
| Module Efficiency (lm/W) | 155 |
| Dimension | 60mm X 60mm |
| Compatible Driver | 20W-700mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LH502C | 0,910 | 0,946 | 1 | 1,01 | 1 |




## FLS-IDL-LLM-280024-11S3-030-840-CC SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 10 Series 3 Parallel.
- Luminous flux range from 687 lm to 2065 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

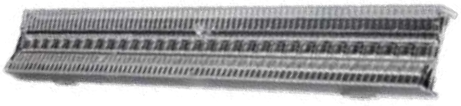
## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-280024-G1F416-2835-030-CC**

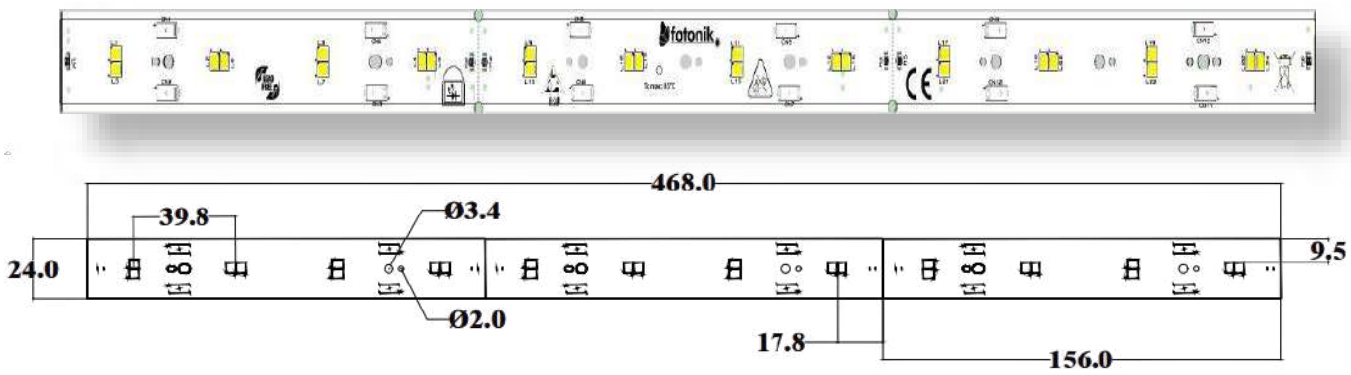
| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| Compatible Lens | LEDIL Linnea gc | |
| LED Quantity | 30 | 30 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 31 | 30 |
| Module Operating Current (mA) | 150 | 450 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 4.4 | 13 |
| Module Light Output (lm) | 687 | 2065 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 280mm X 24mm | |
| Compatible Driver | 5W-150mA | 15W-450mA |

*Lumens tolerance of ±10% on intensity measurements.*



SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-468024-11S3-024-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 12 Series 2 Parallel.
- Luminous flux range from 549 lm to 1652 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

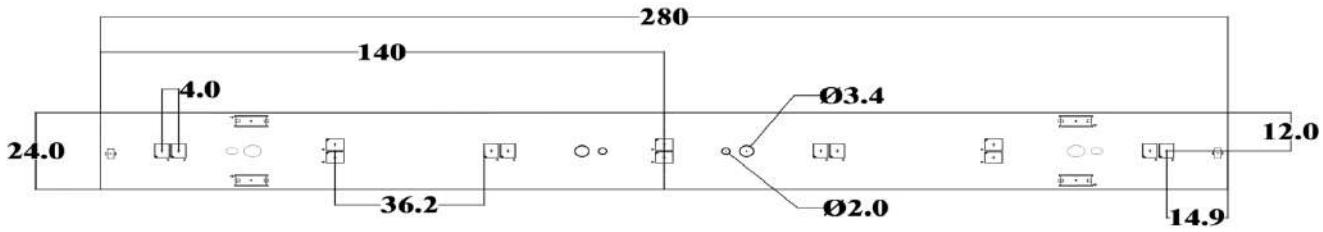
**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-468024-G1F416-2835-024-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| Compatible Lens | LEDIL Daisy 28x1 | |
| LED Quantity | 24 | 24 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 37.2 | 36 |
| Module Operating Current (mA) | 100 | 300 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 3.50 | 10.4 |
| Module Light Output (lm) | 549 | 1652 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 468mm X 24mm | |
| Compatible Driver | 5W-100mA | 12W-300mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-280024-11S3-014-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 7 Series 2 Parallel.
- Luminous flux range from 320 lm to 961 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-28024-G1F416-2835-014-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| Compatible Lens | LEDIL Daisy 7x1 | |
| LED Quantity | 14 | 14 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 21.7 | 21 |
| Module Operating Current (mA) | 100 | 300 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 2.1 | 10,4 |
| Module Light Output (lm) | 320 | 961 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 280mm X 24mm | |
| Compatible Driver | 5W-100mA | 12W-300mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |


## FLS-IDL-LLM-468024-11S3-024-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 12 Series 2 Parallel.
- Luminous flux range from 549 lm to 1652 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

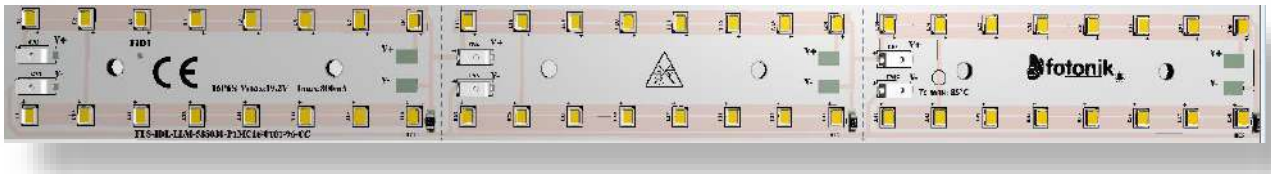
**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-46824-G1F416-2835-024-CC**

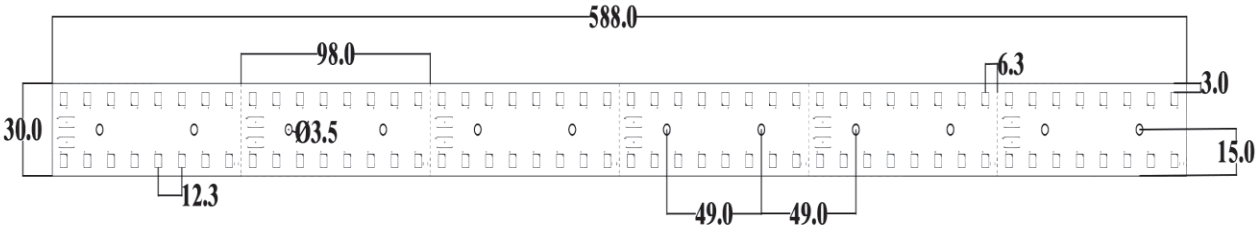
| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| Compatible Lens | LEDIL Daisy 4x1 | |
| LED Quantity | 24 | 24 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 37.2 | 36 |
| Module Operating Current (mA) | 100 | 300 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 3,5 | 10,4 |
| Module Light Output (lm) | 549 | 1652 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 468mm X 24mm | |
| Compatible Driver | 5W-100mA | 12W-300mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |






## FLS-IDL-LLM-588030-11S3-096-840-CC SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 6 Series 16 Parallel.
- Luminous flux range from 2194 lm to 5838 lm
- Efficacy of the module up to 163 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-588030-P1C116-2835-096-CC**

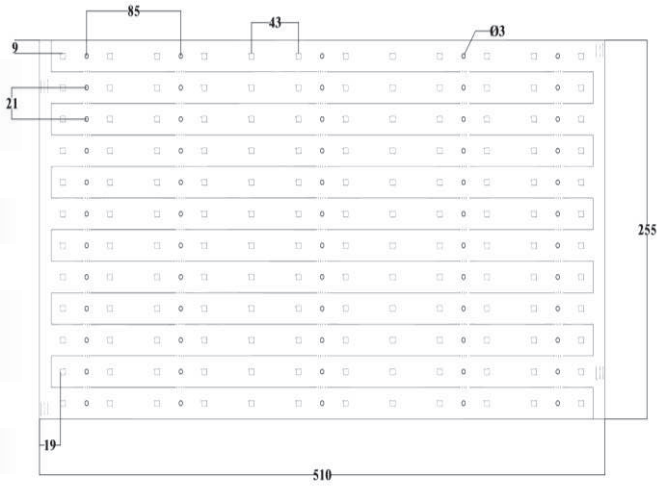
| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 96 | 96 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 18.8 | 36 |
| Module Operating Current (mA) | 900 | 1050 |
| Branch Operating Current (mA) | 56 | 131 |
| Module Power (W) | 16.92 | 37.8 |
| Module Light Output (lm) | 2194 | 5838 |
| Module Efficacy (lm/W) | 156 | 163 |
| Dimension | 588mm X 30mm | |
| Compatible Driver | 40W-900mA | 42W-1050mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |

# FINGER LED MODULE




## FLS-IDL-FLM-510255-12RJ-144-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 12 Series 6 Parallel.
- Luminous flux range from 4957 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

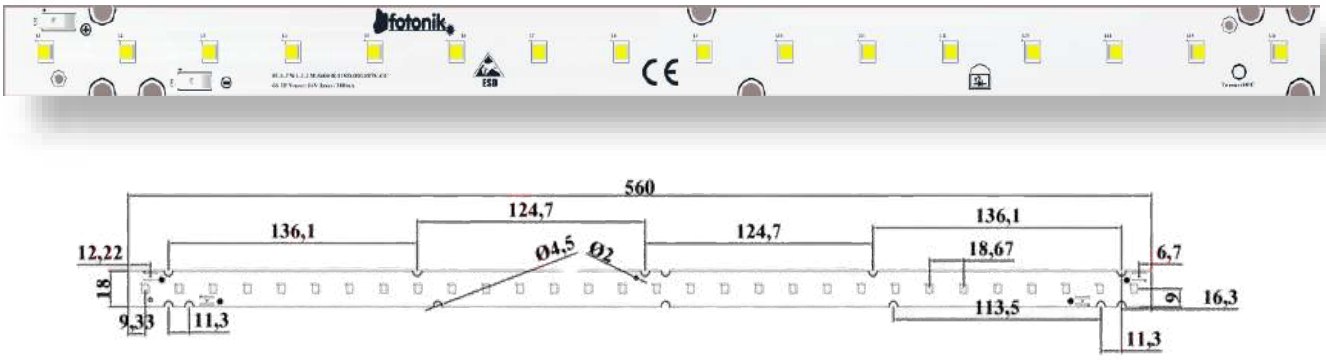
**You may tell us the code below for ordering only PCB**
**FLS-IDL-FLM-510255-G1C116-3030-144-CC**

| Module Specifications | | | |
|---|---|---|---|
| LED Type | LM281B+/RJ | | |
| LED Quantity | 72 | | |
| Correlated Color Temperature (CCT) | 4000°K | 4000°K | 4000°K |
| Color Rendering Index (CRI) | 80+ | 80+ | 80+ |
| Module Operating Voltage (V) | 37.2 | 37.2 | 37.2 |
| Module Operating Current (mA) | 350 | 500 | 700 |
| Branch Operating Current (mA) | 58 | 75 | 116 |
| Module Power (W) | 11,3 | 14,8 | 23,6 |
| Module Light Output (lm) | 2016 | 2586 | 3911 |
| Module Efficacy (lm/W) | 178 | 175 | 166 |
| Dimension | 510mm x 255mm | | |
| Compatible Driver | 15W-350mA | 20W-500mA | 30W-700mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-560018-12RJ-030-840-CC SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 6 Series 5 Parallel.
- Luminous flux range from 685 lm to 2065 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

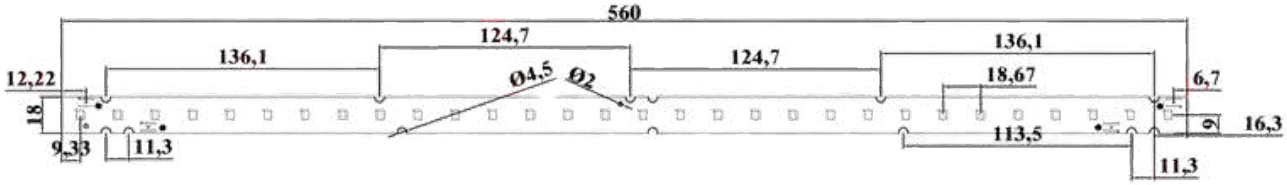
**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-560018-G1MC16-2835-030-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 30 | 30 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000°K |
| Color Rendering Index (CRI) | 80 | 80+ |
| Module Operating Voltage (V) | 18.6 | 18 |
| Module Operating Current (mA) | 350 | 750 |
| Branch Operating Current (mA) | 50 | 150 |
| Module Power (W) | 6.51 | 13 |
| Module Light Output (lm) | 685 | 2065 |
| Module Efficiency (lm/W) | 156 | 160 |
| Dimension | 560mm x 18mm | |
| Compatible Driver | 10W-350mA | 15W-750mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-IDL-LLM-560024-12RJ-072-840-CC

## SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700°K up to 6500°K
- This module is optional and can be connected as 8 Series 9 Parallel.
- Luminous flux range from 1645 lm to 4957 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-IDL-LLM-560024-G1MC16-3030-072-CC**

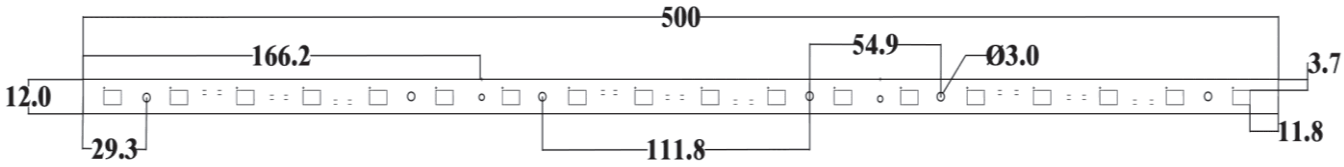
| Module Specifications | | |
|---|---|---|
| LED Type | LM281BA+/S3 | LM281B+/RJ |
| LED Quantity | 72 | 72 |
| Correlated Color Temperature (CCT) | 4000 °K | 4000 °K |
| Color Rendering Index (CRI) | 80 | 80 |
| Module Operating Voltage (V) | 24.8 | 24 |
| Module Operating Current (mA) | 500 | 1350 |
| Branch Operating Current (mA) | 55.5 | 150 |
| Module Power (W) | 12.4 | 31.1 |
| Module Light Output (lm) | 1645 | 4957 |
| Module Efficacy (lm/W) | 156 | 160 |
| Dimension | 560mm x 24mm | |
| Compatible Driver | 15W-500mA | 35W-1350mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281BA+ | 0,910 | 0,945 | 1 | 1,01 | 1 |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |

RGBW LIGHTING SOLUTIONS




## FLS-RGB-LLM-500012-AG10-018-RGB-CV SPECIFICATIONS

- Default driving method is constant voltage input
- This module is optional and can be connected as 6 Series 3 Parallel.
- Luminous flux range from 26730 mcd
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +55 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

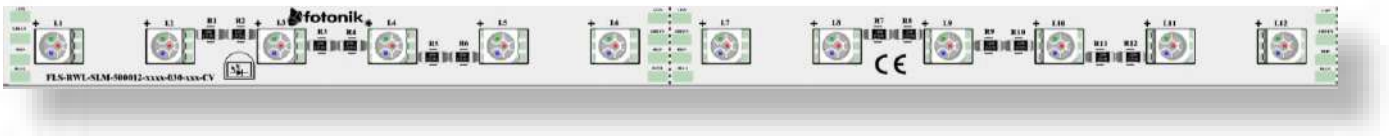
**You may tell us the code below for ordering only PCB**
**FLS-RGB-LLM-500012-G1F416-5050-018-CV**

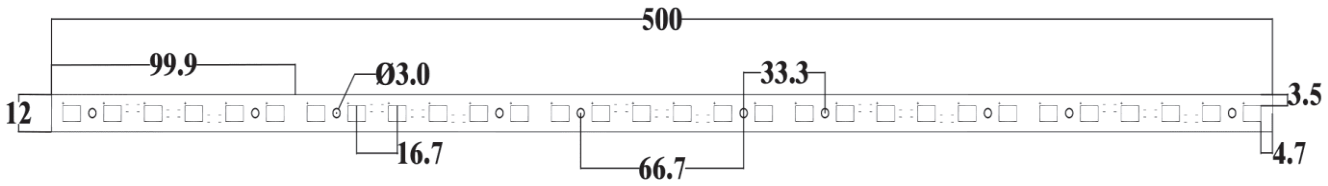
## Module Specifications

| | | | |
|---|---|---|---|
| LED Type | Prolight | | |
| LED Quantity | 18 | | |
| Correlated Color Temperature (CCT) | R | G | B |
| Wavelength (nm) | 620 | 520 | 470 |
| Module Operating Voltage (V) | 24 | | |
| Module Operating Current (mA) | 60 | 60 | 60 |
| Branch Operating Current (mA) | 20 | 20 | 20 |
| Module Power (W) | 4,32 | | |
| Module Light Output (mcd) | 4860 | 18000 | 3870 |
| R+G+B Light Output (lm) | 26730 | | |
| Dimension | 500mm X 12mm | | |

*Candela tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.






## FLS-RGB-LLM-500012-AG10-030-RGB-CV

### SPECIFICATIONS

- Default driving method is constant voltage input
- This module is optional and can be connected as 6 Series 5 Parallel.
- Luminous flux range from 44400 mcd
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +55 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

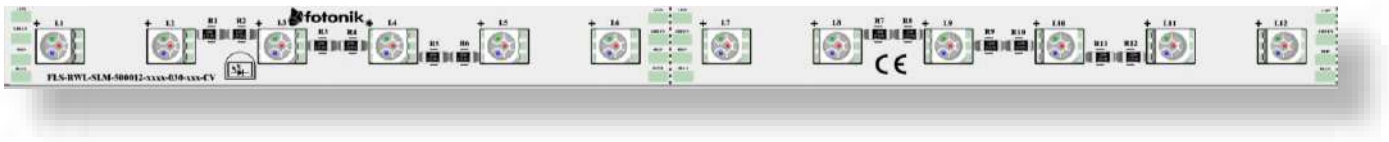
**You may tell us the code below for ordering only PCB**

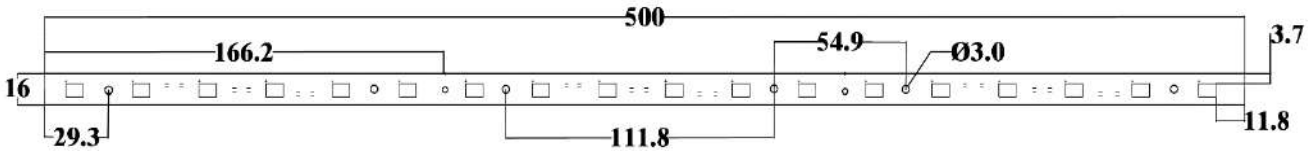
**FLS-RGB-LLM-500012-G1F416-5050-030-CV**

| Module Specifications | | | |
|---|---|---|---|
| LED Type | Prolight | | |
| LED Quantity | 30 | | |
| Correlated Color Temperature (CCT) | R | G | B |
| Wavelength (nm) | 620 | 520 | 470 |
| Module Operating Voltage (V) | 24 | | |
| Module Operating Current (mA) | 100 | 100 | 100 |
| Branch Operating Current (mA) | 20 | 20 | 20 |
| Module Power (W) | 7.2 | | |
| Module Light Output (mcd) | 8100 | 30000 | 6300 |
| R+G+B Light Output (lm) | 44400 | | |
| Dimension | 500mm X 12mm | | |

*Candela tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.






## FLS-RGB-LLM-500012-AE10-018-RGB-CV

## SPECIFICATIONS

- Default driving method is constant voltage input
- This module is optional and can be connected as 6 Series 3 Parallel.
- Luminous flux range from 42120 mcd
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +55 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

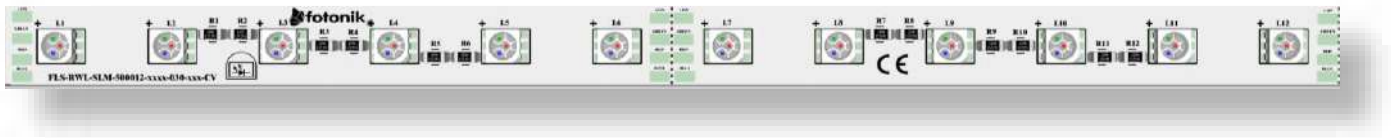
**You may tell us the code below for ordering only PCB**
**FLS-RGB-LLM-500012-G1F416-5050-018-CV**

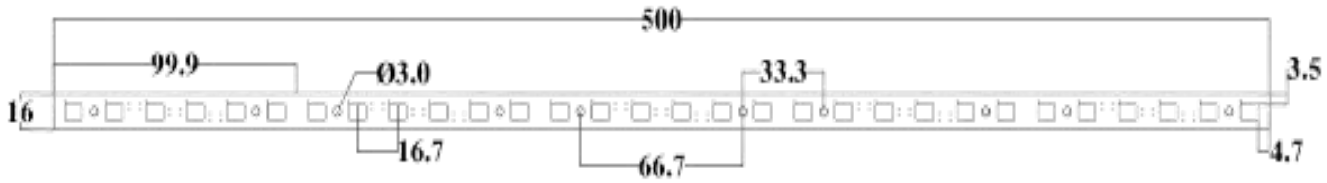
## Module Specifications

| | | | | |
|---|---|---|---|---|
| LED Type | Prolight | | | |
| LED Quantity | 18 | | | |
| Correlated Color Temperature (CCT) | R | G | B | W |
| Wavelength (nm) | 619 | 521 | 465 | 3700°K |
| Module Operating Voltage (V) | 24 | | | |
| Module Operating Current (mA) | 60 | 60 | 60 | 360 |
| Branch Operating Current (mA) | 20 | 20 | 20 | 30/60 |
| Module Power (W) | 13 | | | |
| Module Light Output (mcd) | 1620 | 33300 | 7200 | - |
| Natural White Light Output(lm) | | | | 189/378 |
| R+G+B Light Output (mcd) | 42120 | | | |
| Dimension | 500x16mm | | | |

*Candela tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.






## FLS-RGB-LLM-500012-AE10-030-RGB-CV

### SPECIFICATIONS

- Default driving method is constant voltage input
- This module is optional and can be connected as 6 Series 5 Parallel.
- Luminous flux range from 94500 mcd
- FR4 used as PCB material
- Operating Temperature from -40 °C up to +55 °C
- Storage Temperature -40 °C up to +55 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

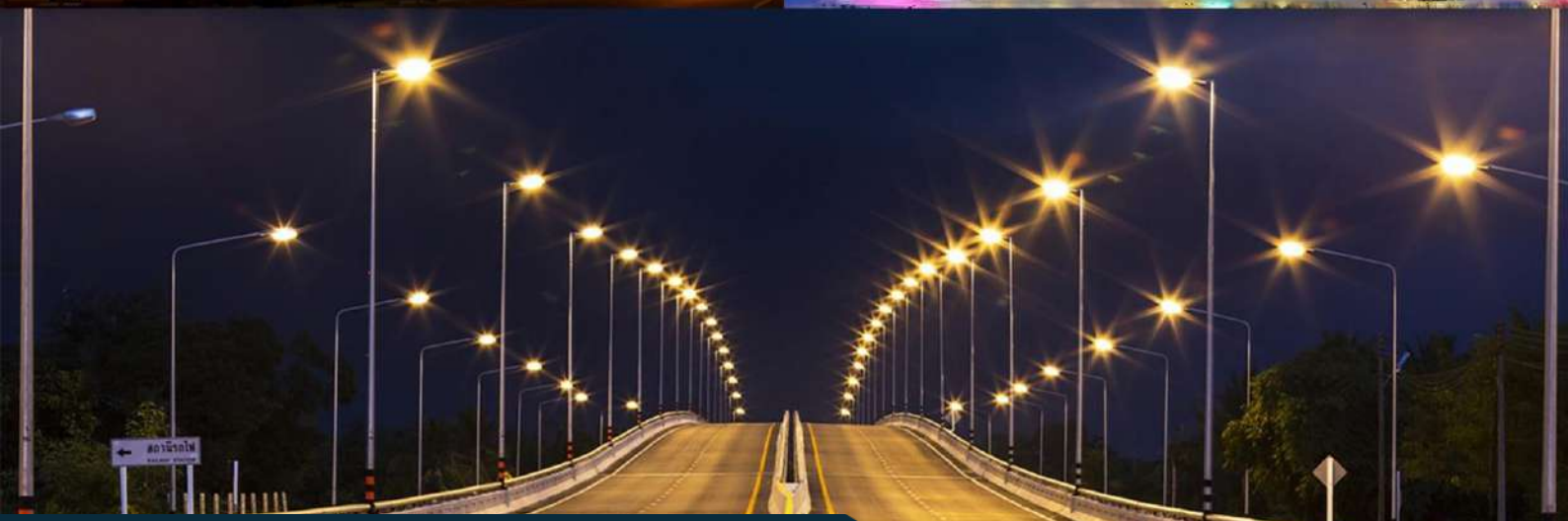
**You may tell us the code below for ordering only PCB**
**FLS-RGB-LLM-500012-G1F416-5050-030-CV**

### Module Specifications

| | | | | |
|---|---|---|---|---|
| LED Type | Prolight | | | |
| LED Quantity | 30 | | | |
| Correlated Color Temperature (CCT) | R | G | B | W |
| Wavelength (nm) | 619 | 521 | 465 | 3700°K |
| Module Operating Voltage (V) | 24 | | | |
| Module Operating Current (mA) | 100 | 100 | 100 | 300 |
| Branch Operating Current (mA) | 20 | 20 | 20 | 30/60 |
| Module Power (W) | 14.4 | | | |
| Module Light Output (mcd) | 27000 | 55500 | 12000 | - |
| Natural White Light Output(lm) | | | | 315/630 |
| R+G+B Light Output (mcd) | 94500 | | | |
| Dimension | 500x16mm | | | |

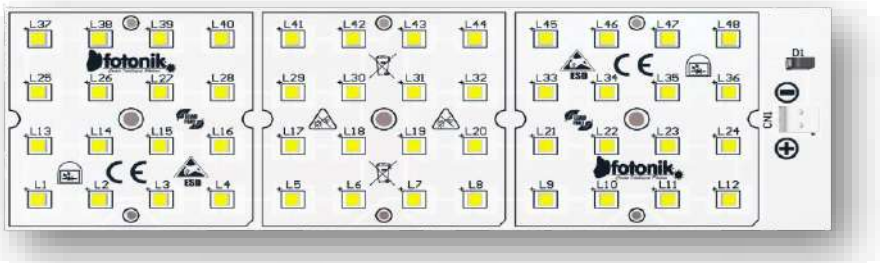
*Candela tolerance of ±10% on intensity measurements.*

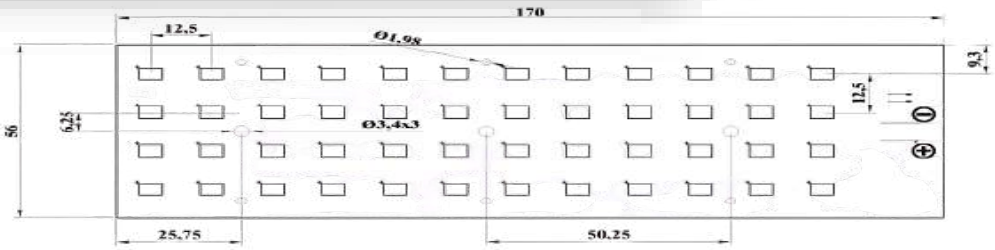
ProLight Opto LED's inside.



# OUTDOOR LIGHTING SOLUTIONS

# SQUARE LED MODULE






## FLS-ODL-SLM-170056-13SF-048-850-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Square LED module CCT Range from 2700°K up to 6500°K, 5000°K as standart
- Ideal for industrial light and flood light
- This module is optional and can be connected as 6 Series 8 Parallel.
- Luminous flux range from 4875 lm to 6445 lm
- Efficacy of the module up to 151 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**

**FLS-ODL-SLM-170056-G1MC16-3030-048-CC**

## Module Specifications

| | | |
|---|---|---|
| LED Type | LM302D/SF | LM282B+/SB |
| Compatible Lens | LEDIL Stradella 16 | |
| LED Quantity | 48 | 48 |
| Correlated Color Temperature (CCT) | 5000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 36,6 | 37.8 |
| Module Operating Current (mA) | 1200 | 1050 |
| Branch Operating Current (mA) | 150 | 131 |
| Module Power (W) | 42.7 | 37.1 |
| Module Light Output (lm) | 6445 | 4875 |
| Module Efficacy (lm/W) | 151 | 132 |
| Dimension | 170mm x 56mm | |
| Compatible Driver | 50W–1200mA | 40W-1050mA |

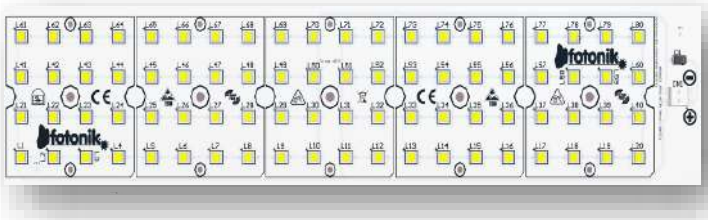
*Lumens tolerance of ±10% on intensity measurements.*

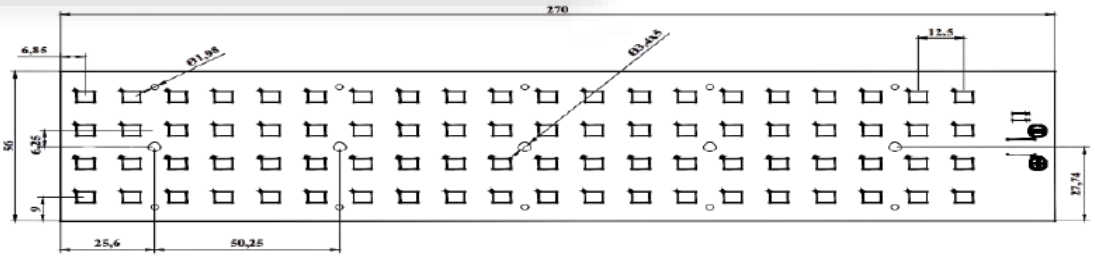
SAMSUNG LED's inside.

## Lumen Output Multiplier

| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
|---|---|---|---|---|---|
| LM302D | 0,88 | 0,93 | 0,976 | 1 | 1,02 |
| LM282B+ | 0,78 | 0,81 | 0,85 | 1 | 0,85 |

# SQUARE LED MODULE






## FLS-ODL-SLM-270056-13SF-080-850-CC SPECIFICATIONS

- Default driving method is constant current input
- Square LED module CCT Range from 2700°K up to 6500°K, 5000°K as standart
- Ideal for industrial light and flood light
- This module is optional and can be connected as 10 Series 8 Parallel.
- Luminous flux range from 8125 lm to 10742 lm
- Efficacy of the module up to 151 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-ODL-SLM-270056-G1MC16-3030-080-CC**

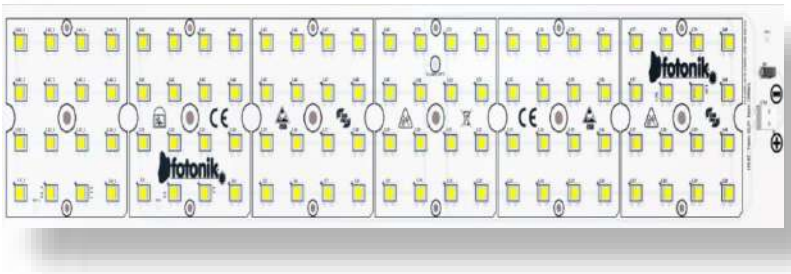
| Module Specifications | | |
|---|---|---|
| LED Type | LM302D/SF | LM282B+/SB |
| Compatible Lens | LEDIL Stradella 16 | |
| LED Quantity | 80 | 80 |
| Correlated Color Temperature (CCT) | 5000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 61 | 63 |
| Module Operating Current (mA) | 1200 | 1050 |
| Branch Operating Current (mA) | 150 | 131 |
| Module Power (W) | 71.2 | 61.8 |
| Module Light Output (lm) | 10742 | 8125 |
| Module Efficacy (lm/W) | 151 | 132 |
| Dimension | 270mm x 56mm | |
| Compatible Driver | 75W–1200mA | 65W-1050mA |

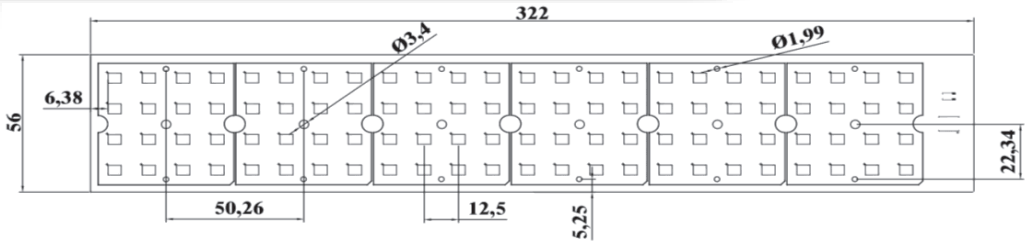
*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM302D | 0,88 | 0,93 | 0,976 | 1 | 1,02 |
| LM282B+ | 0,78 | 0,81 | 0,85 | 1 | 0,85 |

# SQUARE LED MODULE






## FLS-ODL-SLM-322056-13SF-096-850-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Square LED module CCT Range from 2700°K up to 6500°K, 5000°K as standart
- Ideal for industrial light and flood light
- This module is optional and can be connected as 12 Series 8 Parallel.
- Luminous flux range from 9600 lm to 12891 lm
- Efficacy of the module up to 151 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**

**FLS-ODL-SLM-322056-G1MC16-3030-096-CC**

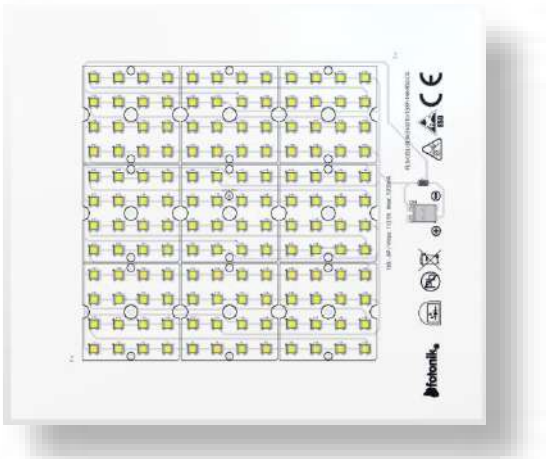
| Module Specifications | | |
|---|---|---|
| LED Type | LM302D/SF | LM282B+/SB |
| Compatible Lens | LEDIL Stradella 16 | |
| LED Quantity | 96 | 96 |
| Correlated Color Temperature (CCT) | 5000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 73.2 | 75.6 |
| Module Operating Current (mA) | 1200 | 1050 |
| Branch Operating Current (mA) | 150 | 131 |
| Module Power (W) | 85.4 | 74.2 |
| Module Light Output (lm) | 12891 | 9600 |
| Module Efficacy (lm/W) | 151 | 130 |
| Dimension | 322mm x 56mm | |
| Compatible Driver | 90W–1200mA | 80W-1050mA |

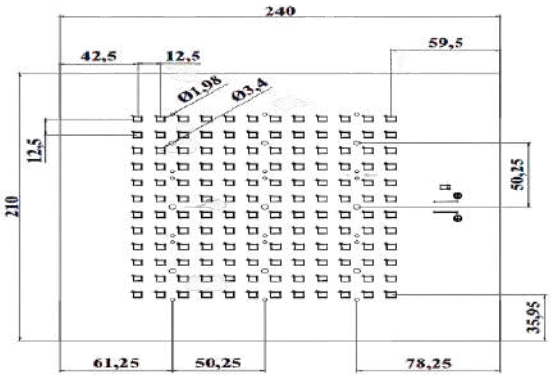
*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM302D | 0,88 | 0,93 | 0,976 | 1 | 1,02 |
| LM282B+ | 0,78 | 0,81 | 0,85 | 1 | 0,85 |

# SQUARE LED MODULE






## FLS-ODL-SLM-240210-13SF-144-850-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Square LED module CCT Range from 2700°K up to 6500°K, 5000°K as standart
- Ideal for industrial light and flood light
- This module is optional and can be connected as 18 Series 8 Parallel.
- Luminous flux range from 14625 lm to 19336 lm
- Efficacy of the module up to 151 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-ODL-SLM-240210-G1MC16-3030-144-CC**

## Module Specifications

| LED Type | LM302D/SF | LM282B+/SB |
|---|---|---|
| Compatible Lens | LEDIL Stradella 16 | |
| LED Quantity | 144 | 144 |
| Correlated Color Temperature (CCT) | 5000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 109,8 | 113.4 |
| Module Operating Current (mA) | 1200 | 1050 |
| Branch Operating Current (mA) | 150 | 131 |
| Module Power (W) | 128.1 | 111.3 |
| Module Light Output (lm) | 19336 | 14625 |
| Module Efficacy (lm/W) | 151 | 132 |
| Dimension | 240mm x 210mm | |
| Compatible Driver | 150W–1200mA | 120W-1050mA |

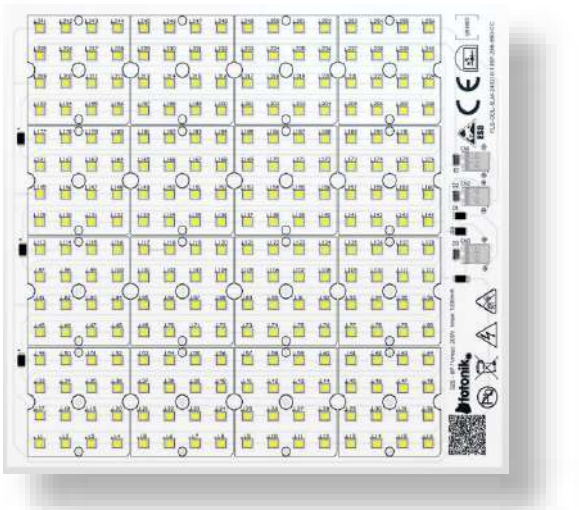
*Lumens tolerance of ±10% on intensity measurements.*

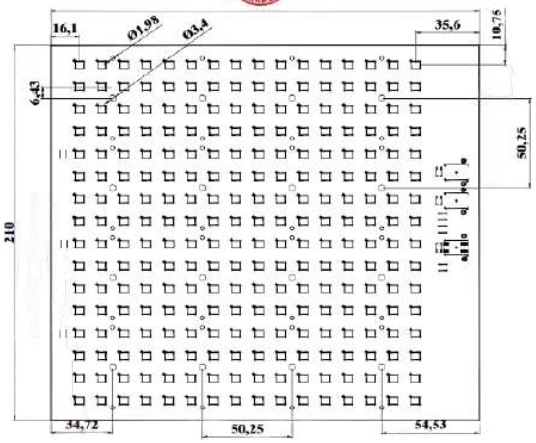
SAMSUNG LED's inside.

## Lumen Output Multiplier

| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
|---|---|---|---|---|---|
| LM302D | 0,88 | 0,93 | 0,976 | 1 | 1,02 |
| LM282B+ | 0,78 | 0,81 | 0,85 | 1 | 0,85 |

# SQUARE LED MODULE






## FLS-ODL-SLM-240210-13SF-256-850-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Square LED module CCT Range from 2700°K up to 6500°K, 5000°K as standart
- Ideal for industrial light and flood light
- This module is optional and can be connected as 32 Series 8 Parallel.
- Luminous flux range from 25999 lm to 34375 lm
- Efficacy of the module up to 151 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-ODL-SLM-240210-G1MC16-3030-256-CC**

## Module Specifications

| LED Type | LM302D/SF | LM282B+/SB |
|---|---|---|
| Compatible Lens | LEDIL Stradella 16 | |
| LED Quantity | 256 | 256 |
| Correlated Color Temperature (CCT) | 5000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 195,2 | 214.4 |
| Module Operating Current (mA) | 1200 | 1050 |
| Branch Operating Current (mA) | 150 | 131 |
| Module Power (W) | 227.8 | 198 |
| Module Light Output (lm) | 34375 | 25999 |
| Module Efficacy (lm/W) | 151 | 132 |
| Dimension | 240mm x 210mm | |
| Compatible Driver | 240W–1200mA | 200W-1050mA |

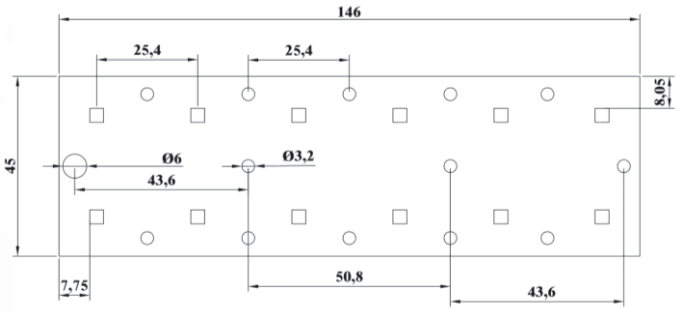
*Lumens tolerance of ± 10% on intensity measurements.*

SAMSUNG LED's inside.

## Lumen Output Multiplier

| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
|---|---|---|---|---|---|
| LM302D | 0,88 | 0,93 | 0,976 | 1 | 1,02 |
| LM282B+ | 0,78 | 0,81 | 0,85 | 1 | 0,85 |

# SQUARE LED MODULE




## FLS-ODL-SLM-146045-13N3-012-850-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Linear White LED module CCT Range from 2700°K up to 6500°K
- Ideal for industrial light and flood light
- This module is optional and can be connected as 6 Series 2 Parallel.
- Typ. luminous flux of 1848 lm
- Efficacy of the module up to 152 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-ODL-SLM-146045-G1MC16-3535-012-CC**

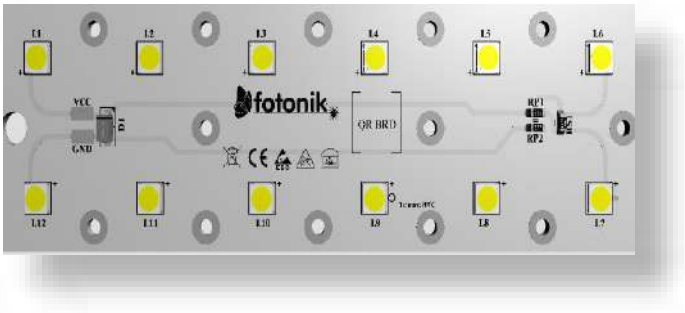
| Module Specifications | |
|---|---|
| LED Type | LH351B/N3 |
| Compatible Lens | LEDIL Strada 2x6 |
| LED Quantity | 12 |
| Correlated Color Temperature (CCT) | 4000 °K |
| Color Rendering Index (CRI) | 80+ |
| Module Operating Voltage (V) | 18 |
| Module Operating Current (mA) | 700 |
| Branch Operating Current (mA) | 350 |
| Module Power (W) | 12.2 |
| Module Light Output (lm) | 1848 |
| Module Efficacy (lm/W) | 152 |
| Dimension | 146mm x 45mm |
| Compatible Driver | 15W-700mA |

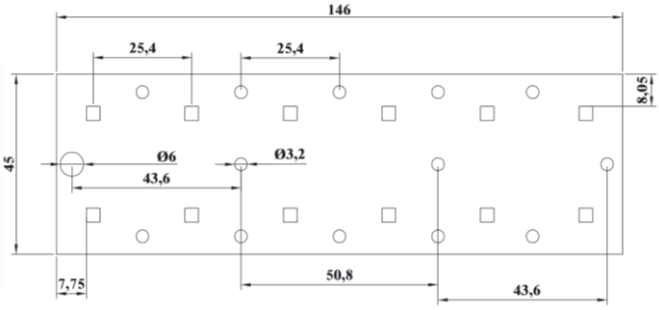
*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LH351B | 1 | 1 | 1 | 1 | 1 |

# SQUARE LED MODULE






## FLS-ODL-SLM-146045-15A2-012-850-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Linear White LED module CCT Range from 2700°K up to 6500°K
- Ideal for industrial light and flood light
- This module is optional and can be connected as 6 Series 2 Parallel.
- Typ. luminous flux of 7200 lm
- Efficacy of the module up to 141 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥2 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +85 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

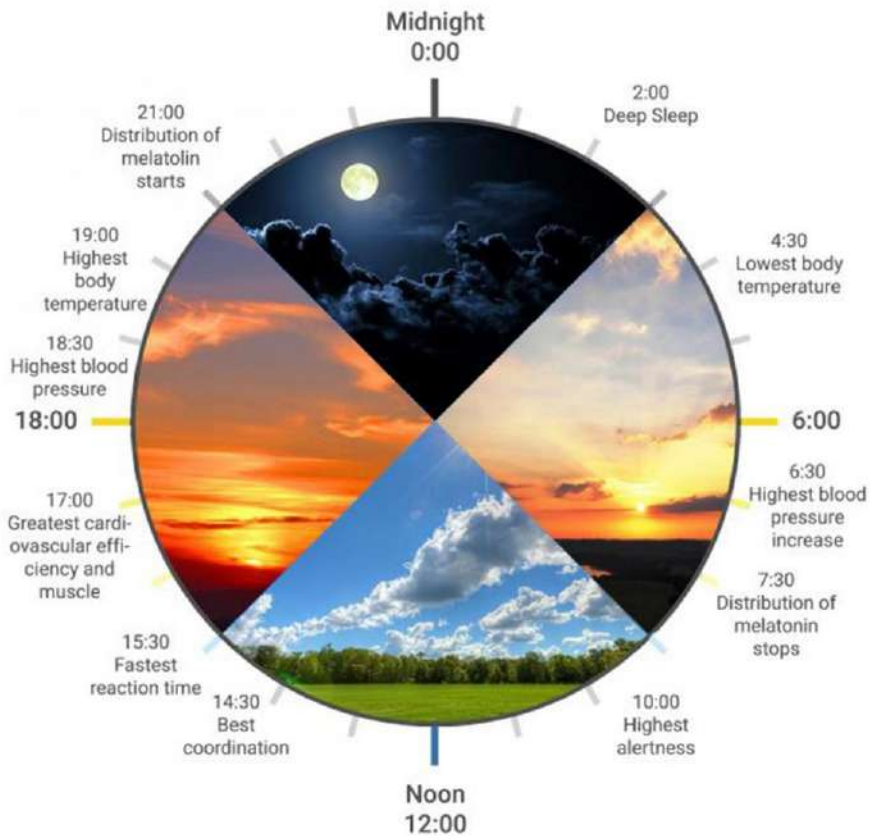
**You may tell us the code below for ordering only PCB**
**FLS-ODL-SLM-146045-G1MC16-5050-012-CC**

| Module Specifications | |
|---|---|
| LED Type | LH502C/A2 |
| Compatible Lens | LEDIL Strada 2x6 |
| LED Quantity | 12 |
| Correlated Color Temperature (CCT) | 4000 °K |
| Color Rendering Index (CRI) | 80+ |
| Module Operating Voltage (V) | 36.6 |
| Module Operating Current (mA) | 1400 |
| Branch Operating Current (mA) | 700 |
| Module Power (W) | 51.24 |
| Module Light Output (lm) | 7200 |
| Module Efficacy (lm/W) | 141 |
| Dimension | 146mm x 45mm |
| Compatible Driver | 60W-1400 mA |

*Lumens tolerance of ±10% on intensity measurements.*

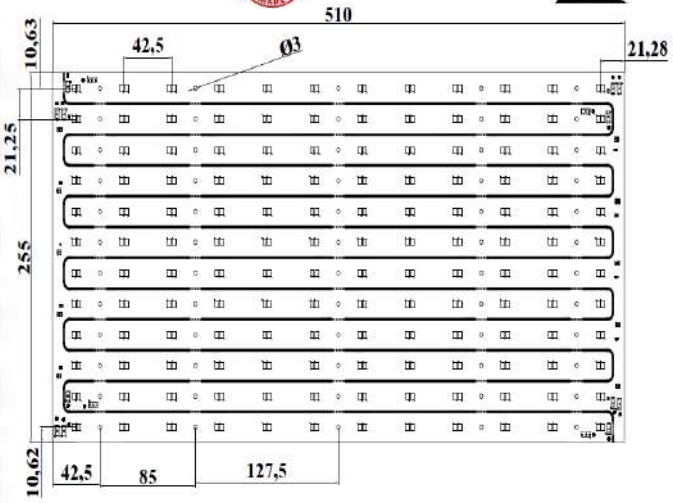
SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LH502 | 0.89 | 0.922 | 1 | 1 | 0.985 |




HUMAN CENTRIC LIGHT. SOLUTIONS

# FINGER LED MODULE




## FLS-HCL-FLM-510255-2212-288-8CL-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Finger Tunable White LED module CCT Range from 3000°K up to 5000°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 12 Series
- 6 Parallel.
- Luminous flux range from 2597 lm
- Efficacy of the module up to 180 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

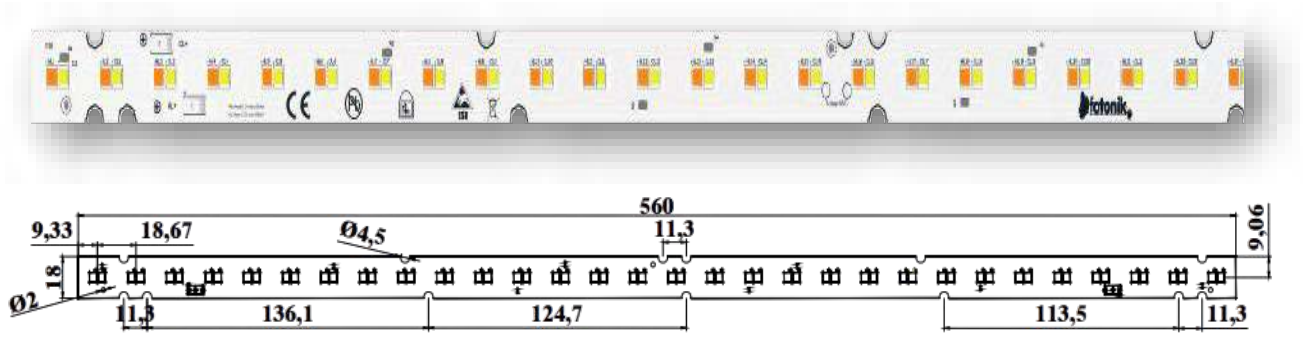
**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-HCL-FLM-510255-G1C116-3030-288-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | Vitasolis | Vitasolis |
| LED Quantity | 72 | 72 |
| Correlated Color Temperature (CCT) | 3000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | 80+ |
| Module Operating Voltage (V) | 16.07 | 16.07 |
| Total Module Operating Current (mA) | 900 | |
| Module Operating Current (mA) | 450 | 450 |
| Branch Operating Current (mA) | 75 | 75 |
| Module Power (W) | 14.5 | 14.5 |
| Module Light Output (lm) | 2477 | 2597 |
| Module Efficacy (lm/W) | 171 | 180 |
| Dimension | 510mm x 255mm | |
| Compatible Driver | 30W–900mA | |

*Lumens tolerance of ±10% on intensity measurements.*

NICHIA LED's inside.




## FLS-HCL-LLM-560018-2100-060-8CL-CC

## SPECIFICATIONS

- Default driving method is constant current input.
- Linear Tunable White LED module CCT Range from 3000°K up to 5000°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 6 Series 5 Parallel.
- Luminous flux range from 1421 lm
- Efficacy of the module up to 174 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- MCPCB used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## Module Specifications

| | | |
|---|---|---|
| LED Type | Vitasolis | Vitasolis |
| LED Quantity | 30 | 30 |
| Correlated Color Temperature (CCT) | 3000 °K | 5000 °K |
| Color Rendering Index (CRI) | 80+ | |
| Module Operating Voltage (V) | 16,2 | 16,2 |
| Module Operating Current (mA) | 500 | 500 |
| Branch Operating Current (mA) | 100 | 100 |
| Module Power (W) | 16,30 | 16,3 |
| Module Light Output (lm) | 1356 | 1421 |
| Module Efficacy (lm/W) | 166 | 174 |
| Dimension | 560mm x 18mm | |
| Compatible Driver | 20W–500mA | |

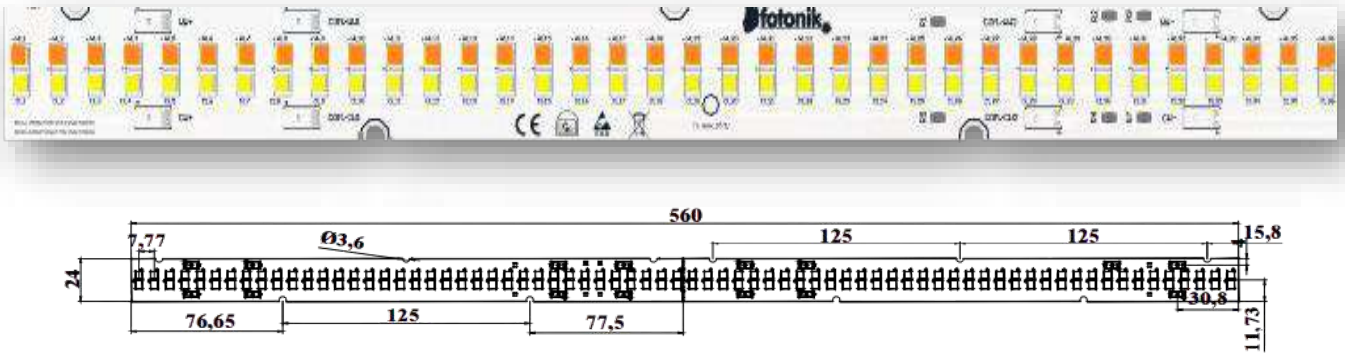
*Lumens tolerance of ±10% on intensity measurements.*

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-HCL-LLM-560018-G1MC16-3030-060-CC**

NICHIA LED's inside.




## FLS-HCL-LLM-560024-42Q5-144-8CL-CC

## SPECIFICATIONS

- Default driving method is constant current input.
- Linear Tunable White LED module CCT Range from 3000°K up to 5000°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 8 Series 9 Parallel.
- Luminous flux range from 2719 lm
- Efficacy of the module up to 101 lm/W tp = 25 °C
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## Module Specifications

| LED Type | Warm White | Cool White |
|---|---|---|
| LED Quantity | 72 | 72 |
| Correlated Color Temperature (CCT) | 3000 °K | 5000 °K |
| Color Rendering Index (CRI) | 95 | |
| Module Operating Voltage (V) | 25,6 | |
| Module Operating Current (mA) | 1050 | 1050 |
| Branch Operating Current (mA) | 116 | 116 |
| Module Power (W) | 26.88 | 26.88 |
| Module Light Output (lm) | 2511 | 2719 |
| Module Efficacy (lm/W) | 94 | 101 |
| Dimension | 560mm x 24mm | |
| Compatible Driver | 30W-1050mA | |

*Lumens tolerance of ±10% on intensity measurements.*

## STANDARTS

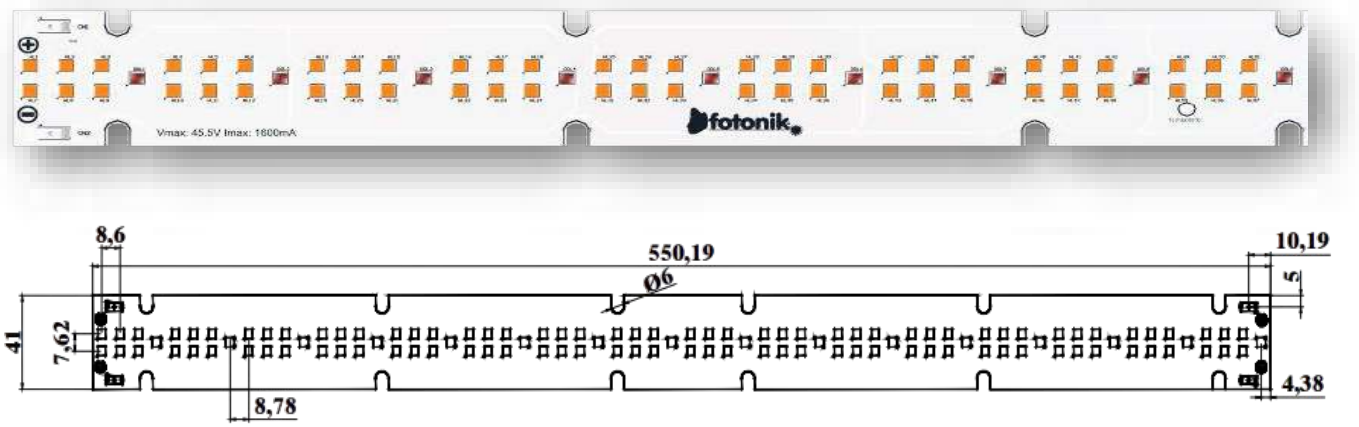
**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**

**FLS-HCL-LLM-560024-G1MC16-3030-144-CC**

SEOUL SEMICONDUCTOR LED's inside.

# HORTICULTURE LIGHTING SOLUTIONS




## FLS-HOL-LLM-550041-11SL-112-8HC-CC

### SPECIFICATIONS

- Default driving method is constant current input
- Ideal for industrial grow light
- This module is optional and can be connected as 14 Series 8 Parallel.
- Typ. luminous flux of 8220 lm
- Efficacy of the module up to 182 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -20 °C up to +50 °C
- Storage Temperature -30 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

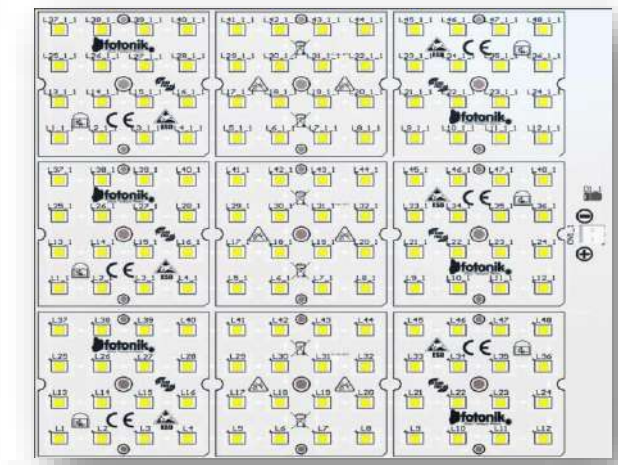
**You may tell us the code below for ordering only PCB**
**FLS-HOL-LLM-550041-G1MC16-3030-112-CC**

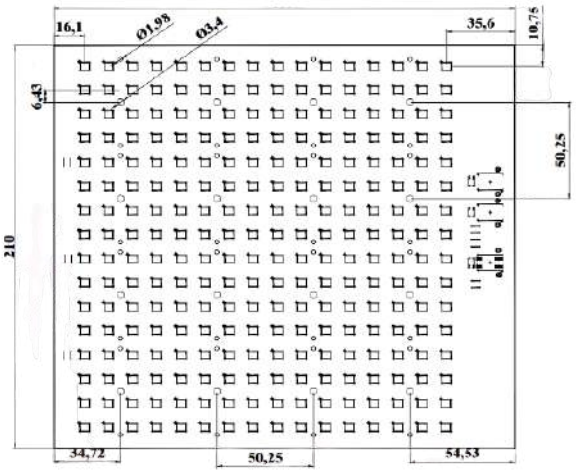
| Module Specifications | |
|---|---|
| LED Type | LM301H/SL |
| LED Quantity | 112 |
| PPF | 141.8 µmol/s |
| PPE | 2.74 µmol/J |
| Module Operating Voltage (V) | 43,1 |
| Module Operating Current (mA) | 1050 |
| Branch Operating Current (mA) | 131,25 |
| Module Power (W) | 45,255 |
| Module Light Output (lm) | 8220 |
| Module Efficacy (lm/W) | 182 |
| Dimension | 550 mm x 41mm |
| Compatible Driver | 50W–1050mA |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

# SQUARE LED MODULE






## FLS-HOL-SLM-240120-8FS2-144-8HC-CC

### SPECIFICATIONS

- Default driving method is constant current input
- Ideal for industrial grow light
- This module is optional and can be connected as 72 Series 2 Parallel.
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -20 °C up to +50 °C
- Storage Temperature -30 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

| Sunplus 20 | Part No | umol/s (type) | umol/s @ 700mA | Vf @ 700mA | LED Qty. | Total umol/s | Power Cons. |
|---|---|---|---|---|---|---|---|
| Deep Red | L1SP-DRD0002F00000 | 2,08 | 4,16 | 2,3 | 72 | 299,52 | 115,92 |
| Far Red | L1SP-FRD0002F00000 | 0,091 | 0,182 | 2,3 | 36 | 6,552 | 57,96 |
| Lime | L1SP-LME0002F00000 | 1,62 | 2,916 | 2,9 | 36 | 104,976 | 73,08 |
| | | | | Total | 144 | 411,048 | 246,96 |

**You may tell us the code below for ordering only PCB**
**FLS-HOL-SLM-240210-G1MC16-3030-144-CC**

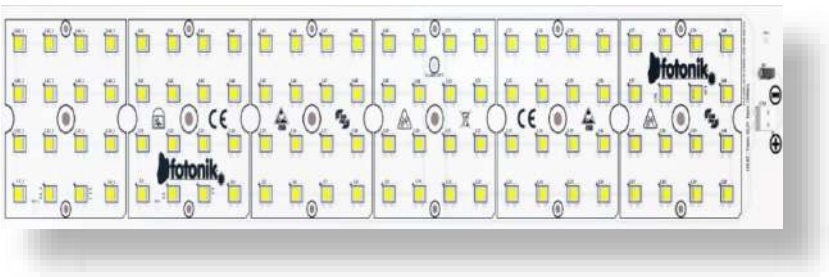
LUMILEDS LED's inside.

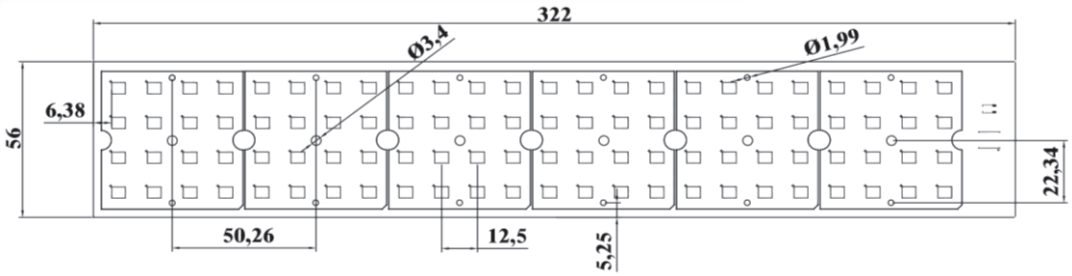
## Module Specifications

| | |
|---|---|
| LED Type | SunPlus20 |
| Compatible Lens | LEDIL Stradella 16 |
| LED Quantity | 144 |
| PPF | 410 µmol/s |
| PPE | 1,85 µmol/J |
| Module Operating Voltage (V) | 185 |
| Module Operating Current (mA) | 1400 |
| Branch Operating Current (mA) | 700 |
| Module Power (W) | 247 |
| Module Light Output (lm) | --- |
| Module Efficacy (lm/W) | --- |
| Dimension | 240 mm x 120mm |
| Compatible Driver | 250W–1400mA |

*Lumens tolerance of ±10% on intensity measurements.*

# SQUARE LED MODULE






## FLS-HOL-SLM-322056-8FS2-048-8HC-CC

### SPECIFICATIONS

- Default driving method is constant current input
- Ideal for industrial grow light
- This module is optional and can be connected as 2 Series 24 Parallel.
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -20 °C up to +50 °C
- Storage Temperature -30 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

| Sunplus 20 | Part No | umol/s (type) | umol/s @ 700mA | Vf @ 700mA | LED Qty. | Total umol/s | Power Cons. |
|---|---|---|---|---|---|---|---|
| Deep Red | L1SP-DRD0002F00000 | 2,08 | 4,16 | 2,3 | 72 | 299,52 | 115,92 |
| Far Red | L1SP-FRD0002F00000 | 0,091 | 0,182 | 2,3 | 36 | 6,552 | 57,96 |
| Lime | L1SP-LME0002F00000 | 1,62 | 2,916 | 2,9 | 36 | 104,976 | 73,08 |
| | | | | Total | 144 | 411,048 | 246,96 |

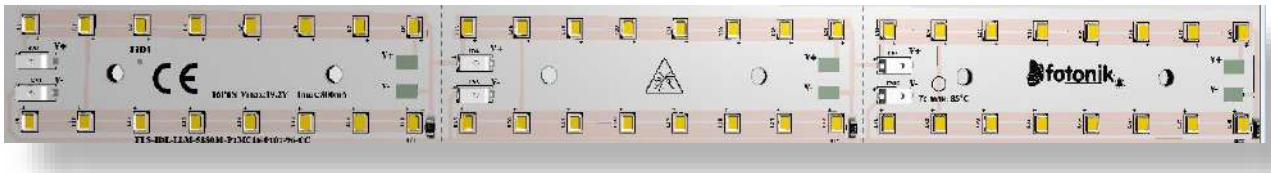
**You may tell us the code below for ordering only PCB**
**FLS-HOL-LLM-322065-G1MC16-3030-048-CC**

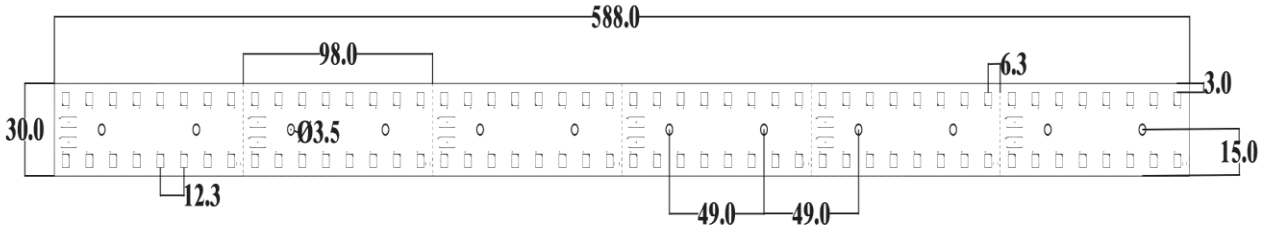
LUMILEDS LED's inside.

## Module Specifications

| | |
|---|---|
| LED Type | SunPlus20 |
| Compatible Lens | LEDIL Stradella 16 |
| LED Quantity | 48 |
| PPF | 137 µmol/s |
| PPE | 1,85 µmol/J |
| Module Operating Voltage (V) | 61 |
| Module Operating Current (mA) | 1400 |
| Branch Operating Current (mA) | 700 |
| Module Power (W) | 82 |
| Module Light Output (lm) | --- |
| Module Efficacy (lm/W) | ---- |
| Dimension | 160 mm x 65mm |
| Compatible Driver | 85W-1400mA |

*Lumens tolerance of ±10% on intensity measurements.*






## FLS-HOL-LLM-588030-8FS3-096-8HC-CC

### SPECIFICATIONS

- Default driving method is constant current input
- Ideal for industrial grow light
- This module is optional and can be connected as 6 Series 16 Parallel.
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- CEM1 used as PCB material
- Operating Temperature from -20 °C up to +50 °C
- Storage Temperature -30 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

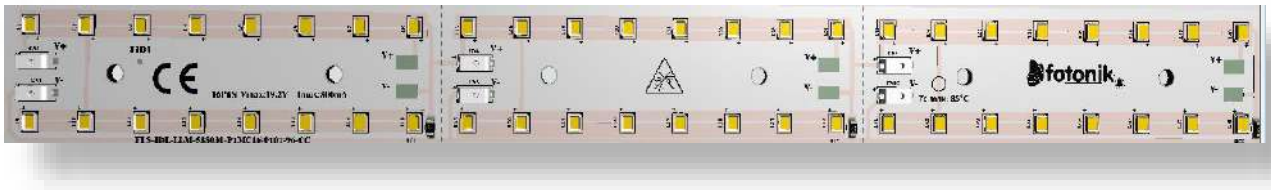
**You may tell us the code below for ordering only**
**PCB FLS-HOL-LLM-588030-P1C116-3030-096-CC**

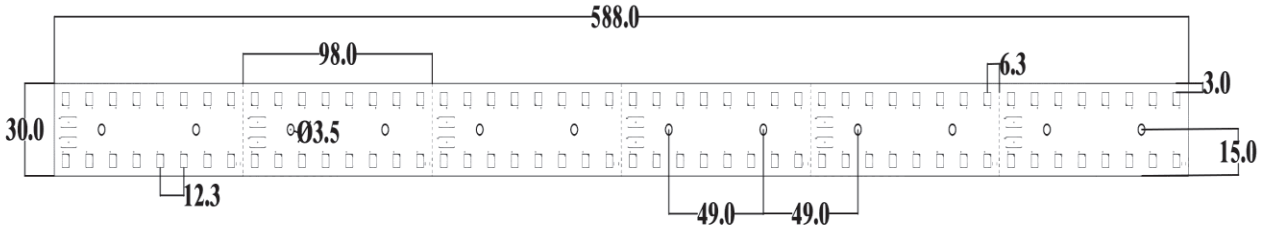
| Module Specifications | |
|---|---|
| LED Type | SunPlus 2835 |
| LED Quantity | 96 |
| PPF | 49,728 µmol/s |
| PPE | 1,8 µmol/J |
| Module Operating Voltage (V | 16,8 |
| Module Operating Current (mA) | 480 |
| Branch Operating Current (mA) | 80 |
| Module Power (W) | 82 |
| Module Light Output (lm) | --- |
| Module Efficacy (lm/W) | --- |
| Dimension | 588 mm x 30mm |

*Lumens tolerance of ±10% on intensity measurements.*

| Compatible Driver | | |
|---|---|---|
| 1-10 V | Xitanium 75W 0.12-0.4A 220V 1-10V 230V | 929000 9537 06 |
| DALI | Xitanium 60W 0.15-0.5A 220V TD21 230V | 929001 6819 06 |
| ON/OFF | Xitanium 60W 0.08-0.35A 220V S 230V | 929001 5091 06 |

LUMILEDS LED's inside.

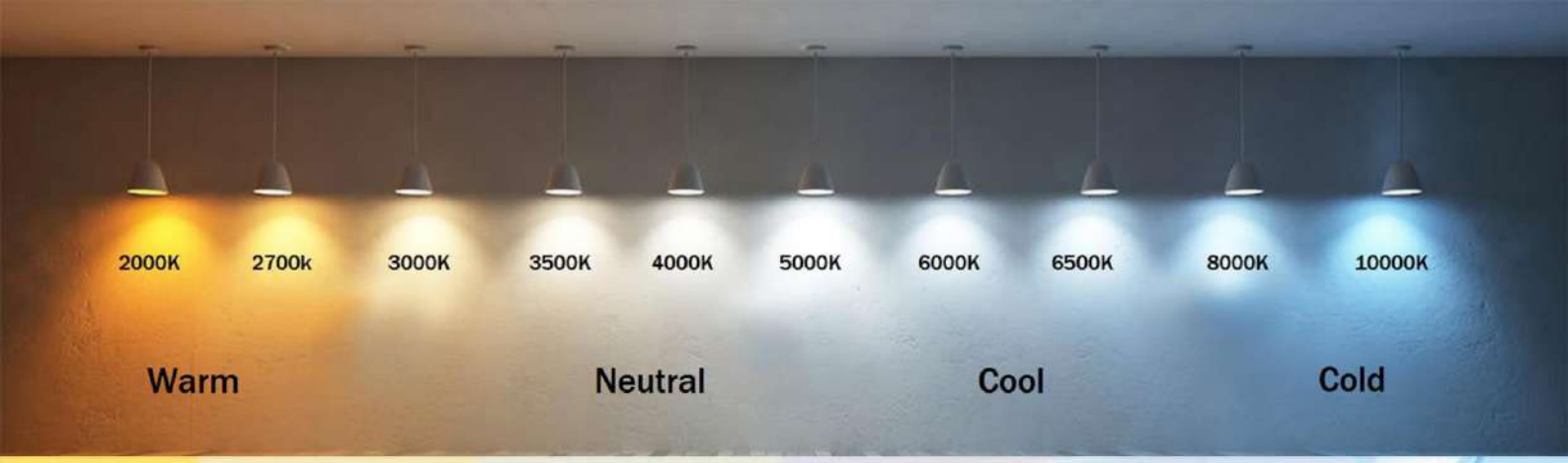





## FLS-HOL-LLM-588030-8FS3-096-8HC-CC

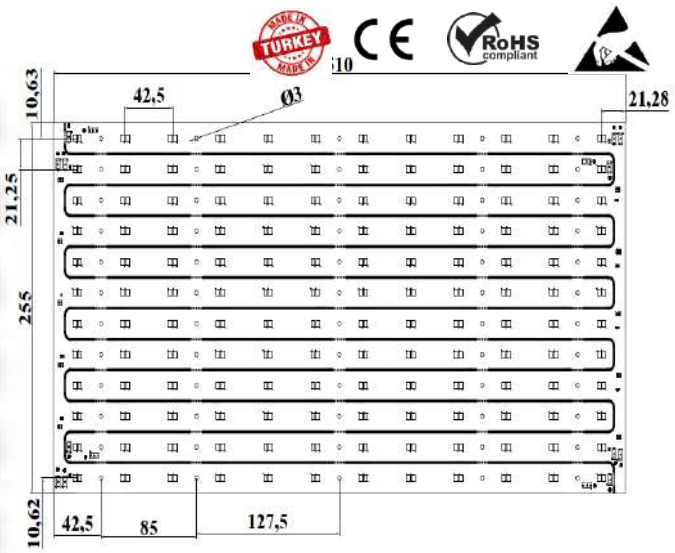
| Color | Part No | umol/s (typ) | Driving Current (A) | umol/s @ 80mA | Vf @ 80mA | LED Qty. | Total umol/s | Power Cons.(W) | PPF/W |
|---|---|---|---|---|---|---|---|---|---|
| Purple %25 Blue | L1SP-PRP2002800000 | 0,74 | 0,08 | 0,518 | 2,7 | 96 | 49,728 | 20,736 | 2,4 |
| Purple %12.5 Blue | L1SP-PRP1002800000 | 0,7 | 0,08 | 0,49 | 2,7 | 96 | 47,04 | 20,736 | 2,27 |
| Purple %2.5 Blue | L1SP-PRP0002800000 | 0,63 | 0,08 | 0,441 | 2,7 | 96 | 42,336 | 20,736 | 2,08 |
| Color | Part No | umol/s (typ) | Driving Current (A) | umol/s @ 80mA | Vf @ 80mA | LED Qty. | Total umol/s | Power Cons.(W) | PPF/W |
| Purple %25 Blue | L1SP-PRP2002800000 | 0,74 | 0,08 | 0,518 | 2,7 | 192 | 89,5104 | 43,5456 | 2,06 |
| Purple %12.5 Blue | L1SP-PRP1002800000 | 0,7 | 0,08 | 0,49 | 2,7 | 192 | 84,672 | 43,5456 | 1,94 |
| Purple %2.5 Blue | L1SP-PRP0002800000 | 0,63 | 0,08 | 0,441 | 2,7 | 192 | 76,2048 | 43,5456 | 1,75 |
| Color | Part No | umol/s (typ) | Driving Current (A) | umol/s @ 80mA | Vf @ 80mA | LED Qty. | Total umol/s | Power Cons.(W) | PPF/W |
| Purple %25 Blue | L1SP-PRP2002800000 | 0,74 | 0,08 | 0,518 | 2,7 | 384 | 179,0208 | 87,0912 | 2,06 |
| Purple %12.5 Blue | L1SP-PRP1002800000 | 0,7 | 0,08 | 0,49 | 2,7 | 384 | 169,344 | 87,0912 | 1,94 |
| Purple %2.5 Blue | L1SP-PRP0002800000 | 0,63 | 0,08 | 0,441 | 2,7 | 384 | 152,4096 | 87,0912 | 1,75 |

**You may tell us the code below for ordering only**
**PCB FLS-HOL-LLM-588030-P1C116-3030-096-CC**




# TUNABLE WHITE LIGHTING SOLUTIONS

# FINGER LED MODULE




## FLS-TWL-FLM-510255-2212-288-8TW-CC

## SPECIFICATIONS

- Default driving method is constant current input
- Finger Tunable White LED module CCT Range from 3000°K up to 5000°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 12 Series 6 Parallel.
- Luminous flux range from 3911 lm
- Efficacy of the module up to 166 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-TWL-FLM-510255-G1C116-3030-288-CC**

## Module Specifications

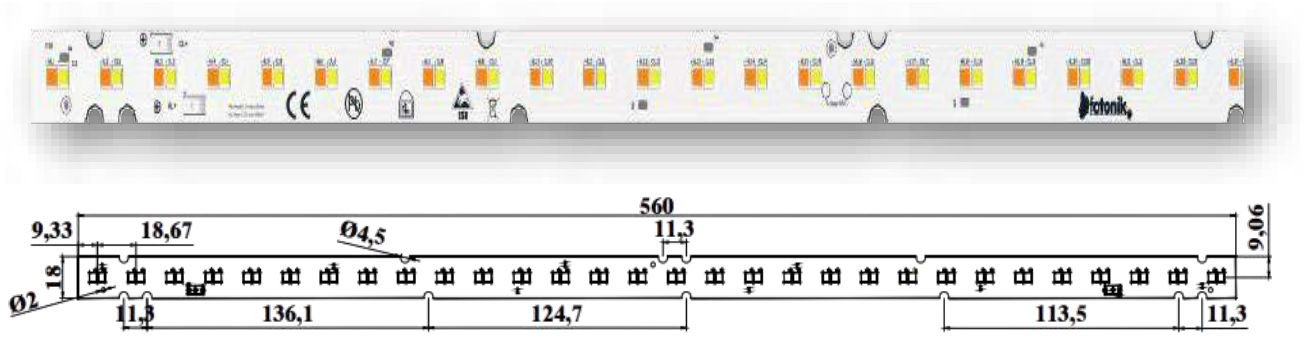
| | | |
|---|---|---|
| LED Type | LM281B+/RJ | |
| LED Quantity | 72 | 72 |
| Correlated Color Temperature (CCT) | 2700 °K | 6500 °K |
| Color Rendering Index (CRI) | 80 | |
| Module Operating Voltage (V) | 36 | 36 |
| Module Total Operating Current (mA) | 700 | |
| Module Operating Current (mA) | 700 | 700 |
| Branch Operating Current (mA) | 116.6 | 116.6 |
| Total Module Power(W) | 25.2 | |
| Module Power (W) | 25.2 | 25.2 |
| Module Light Output (lm) | 3636 | 3911 |
| Module Efficacy (lm/W) | 154 | 166 |
| Dimension | 510mm x 255mm | |
| Compatible Driver | 32W-700mA | |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

## Lumen Output Multiplier

| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
|---|---|---|---|---|---|
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-TWL-LLM-560018-2100-060-8TW-CC

## SPECIFICATIONS

- Default driving method is constant current input.
- Linear Tunable White LED module CCT Range from 3000°K up to 5000°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 6 Series 5 Parallel.
- Luminous flux range from 2065 lm
- Efficacy of the module up to 160 lm/W tp = 25 °C
- CRI 80 is standart, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

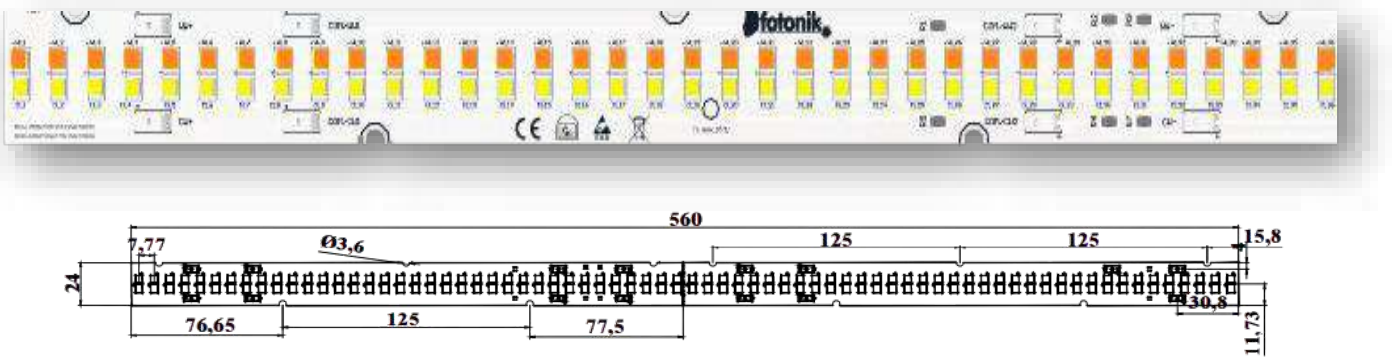
**You may tell us the code below for ordering only PCB**
**FLS-TWL-LLM-560018-G1MC16-3030-060-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | LM281B+/RJ | |
| LED Quantity | 60 | |
| Correlated Color Temperature (CCT) | 2700 °K | 6500 °K |
| Color Rendering Index (CRI) | 80 | |
| Module Operating Voltage (V) | 18 | 18 |
| Module Total Operating Current (mA) | 750 | |
| Module Operating Current (mA) | 750 | 750 |
| Branch Operating Current (mA) | 150 | 150 |
| Total Module Power(W) | 13 | |
| Module Power (W) | 13 | 13 |
| Module Light Output (lm) | 1920 | 2065 |
| Module Efficacy (lm/W) | 148 | 160 |
| Dimension | 560mm x 018mm | |
| Compatible Driver | 20W-750mA | |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-TWL-LLM-560024-42Q5-144-8TW-CC

## SPECIFICATIONS

- Default driving method is constant current input.
- Linear Tunable White LED module CCT Range from 3000°K up to 5000°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 8 Series 9 Parallel.
- Luminous flux range from 4440 lm
- Efficacy of the module up to 101 lm/W tp = 25 °C
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**

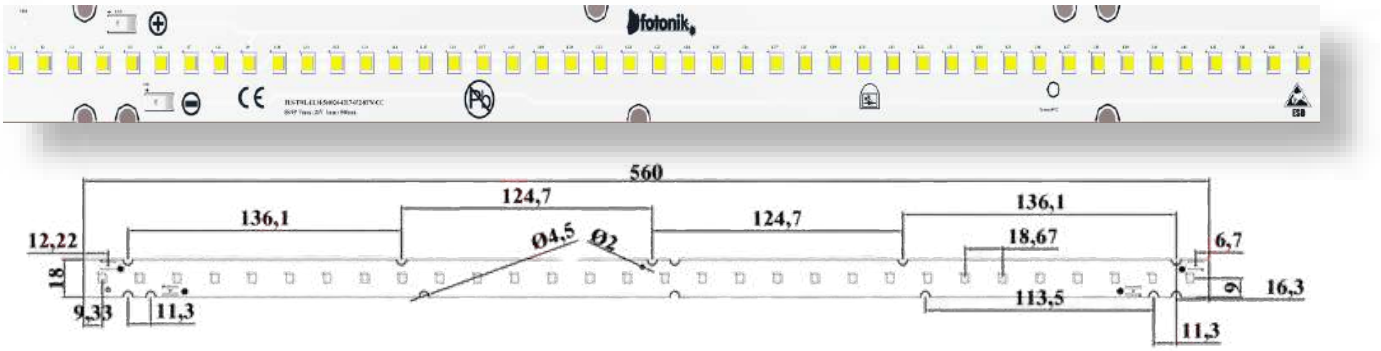
**FLS-TWL-LLM-560024-G1MC16-3030-144-CC**

| Module Specifications | | |
|---|---|---|
| LED Type | LM281B+/RJ | |
| LED Quantity | 72 | 72 |
| Correlated Color Temperature (CCT) | 2700 °K | 6500 °K |
| Color Rendering Index (CRI) | 80 | |
| Module Operating Voltage (V) | 24 | 24 |
| Module Total Operating Current (mA) | 1200 | |
| Module Operating Current (mA) | 1200 | 1200 |
| Branch Operating Current (mA) | 133.3 | 133.3 |
| Total Module Power(W) | 28.8 | |
| Module Power (W) | 28.8 | 28.8 |
| Module Light Output (lm) | 4127 | 4440 |
| Module Efficacy (lm/W) | 151 | 163 |
| Dimension | 560mm x 24mm | |
| Compatible Driver | 50W-1200mA | |

*Lumens tolerance of ±10% on intensity measurements.*

SAMSUNG LED's inside.

| Lumen Output Multiplier | | | | | |
|---|---|---|---|---|---|
| LED | 2700 °K (CRI 80) | 3000 °K (CRI 80) | 4000 °K (CRI 80) | 5000 °K (CRI 80) | 6500 °K (CRI 80) |
| LM281B+ | 0,927 | 0,955 | 1 | 1.013 | 1 |




## FLS-TWL-LLM-560024-42Q5-072-8TW-CC

## SPECIFICATIONS

- Default driving method is constant current input.
- Linear Tunable White LED module CCT Range from 2700°K up to 6500°K
- Optimal solution for Tunable White applications together with DALI DT8 or 2 channel low profile LED Drivers
- This module is optional and can be connected as 8 Series 9 Parallel.
- Typ. luminous flux of 4056 lm or 4148 lm
- Efficacy of the module up to 134 lm/W tp = 25 °C
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Push terminals for quick and simple wiring of LED module to LED module
- CEM1 used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +85 °C
- Storage Temperature -40 °C up to +100 °C
- Simple installation (e.g. push)
- Long life-time > 60,000 hours
- 5-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

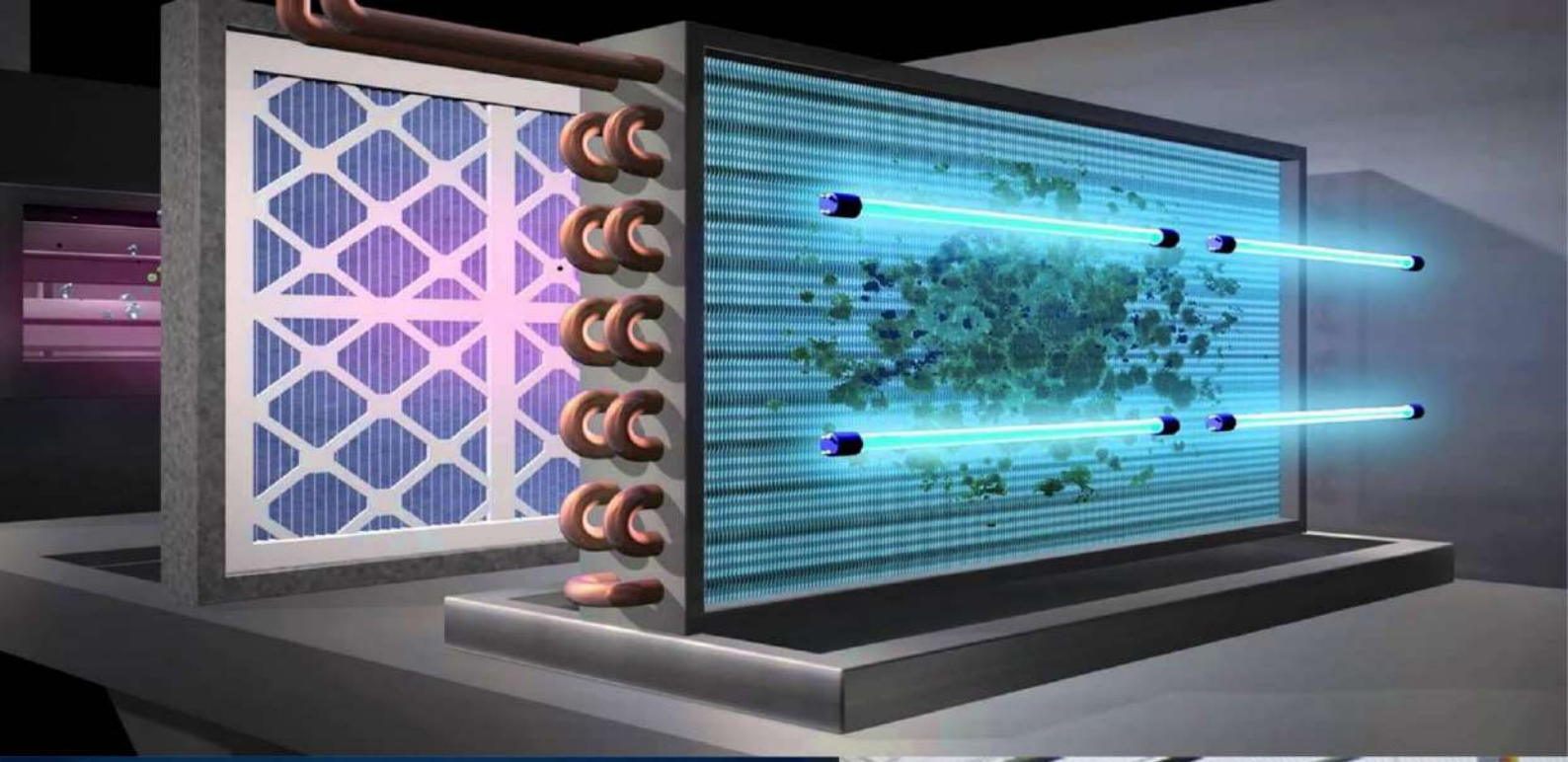
**You may tell us the code below for ordering only PCB**
**FLS-TWL-LLM-560024-G1MC16-3030-072-CC**

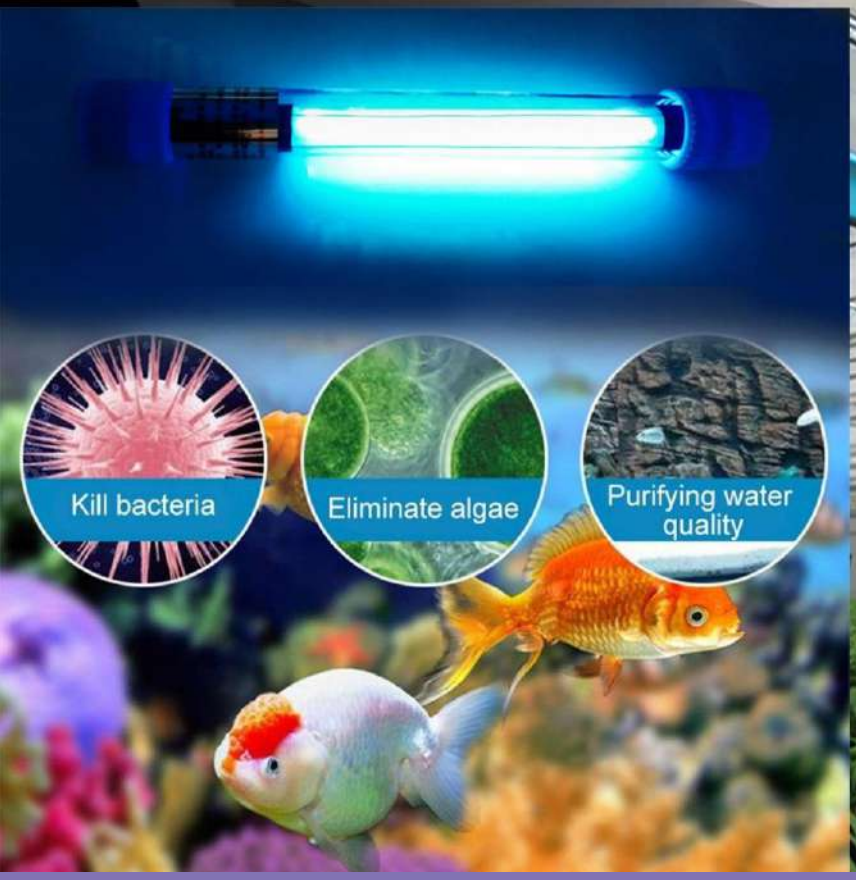
## Module Specifications

| | | | | |
|---|---|---|---|---|
| LED Type | 757G-MT | | | |
| LED Quantity | 72 | | | |
| Correlated Color Temperature (CCT) | 2700 °K | 6500 °K | 2700 °K | 6500 °K |
| Color Rendering Index (CRI) | 80 | | | |
| Module Operating Voltage (V) | 21.6 | 21.6 | 31.5 | 31.5 |
| Module Total Operating Current (mA) | 700 | | 1200 | |
| Module Operating Current (mA) | 700 | 700 | 1200 | 1200 |
| Branch Operating Current (mA) | 77.8 | 77.8 | 133.3 | 133.3 |
| Total Module Power(W) | 15.12 | | 37.8 | |
| Module Power (W) | 15.12 | 15.12 | 29.76 | 29.76 |
| Module Light Output (lm) | 1258 | 1231 | 2097 | 2051 |
| Module Efficacy (lm/W) | 84 | 82 | | |
| Dimension | 560mm x 24mm | | | |
| Compatible Driver | 30W-700mA 2 Channel | | 50W-1200mA 2 Channel | |

*Lumens tolerance of ±10% on intensity measurements.*

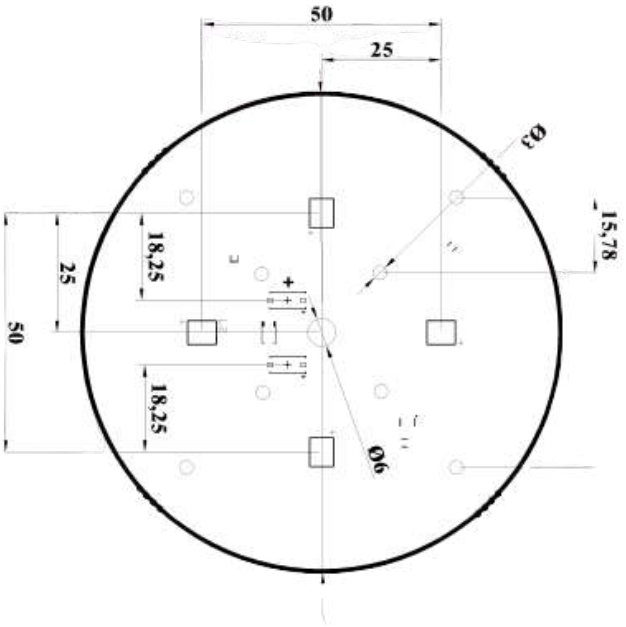
NICHIA LED's inside.






# ULTRAVIOLET LIGHTING SOLUTIONS

# ROUND LED MODULE


## FLS-UVL-RLM-100100-AC0B-004-278-CV/CC

### SPECIFICATIONS

- Default driving method is constant voltage or constant current input
- Wavelength from 270 up to 280 nm, typical 275 nm
- This module is optional and can be connected as 2 Series 2 Parallel.
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +45 °C
- Storage Temperature -40 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 10,000 hours
- 2-year limited warranty

### STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

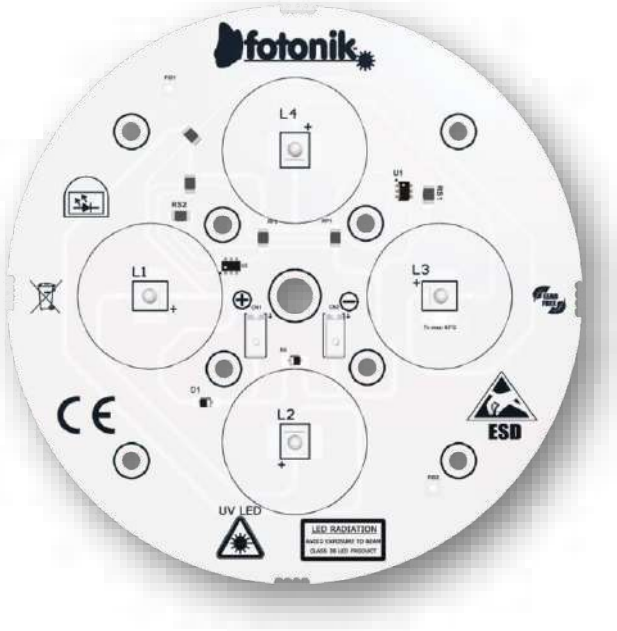
**You may tell us the code below for ordering only PCB**
**FLS-UVL-RLM-100100-G1MC16-3535-004-CV**

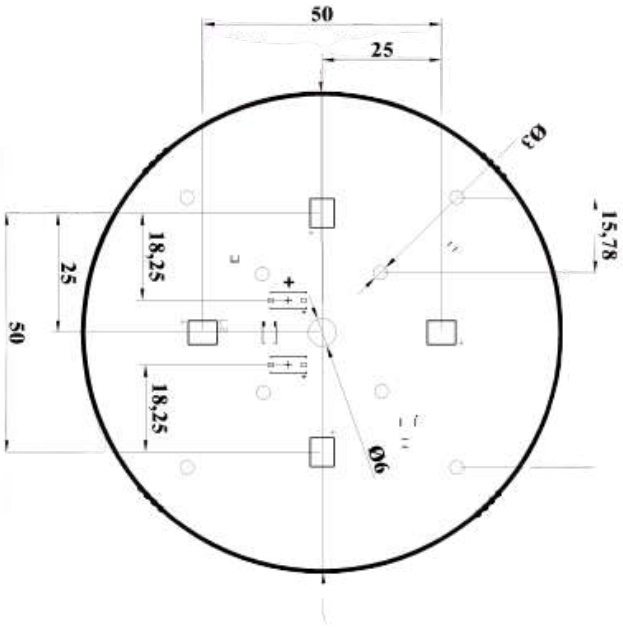
| Module Specifications | |
|---|---|
| LED Type | Prolight |
| LED Quantity | 4 |
| Peak Wavelenght (nm) | 278 |
| Radiometric Power (mW) | 42 |
| Module Operating Voltage (V) | 13,6 |
| Module Operating Current (mA) | 200 |
| Branch Operating Current (mA) | 100 |
| Module Power (W) | 3.84 |
| Dimension | 100mm x 100mm |
| Compatible Driver | 6W-24V |
| Compatible Driver | 6W-250mA |

*Radiometric power tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.

# ROUND LED MODULE




## FLS-UVL-RLM-100100-AB0C-004-309-CV

## SPECIFICATIONS

- Default driving method is constant voltage input
- Wavelength from 303 up to 315 nm, typical 309 nm
- This module is optional and can be connected as 2 Series 2 Parallel.
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +45 °C
- Storage Temperature -40 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 10,000 hours
- 2-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

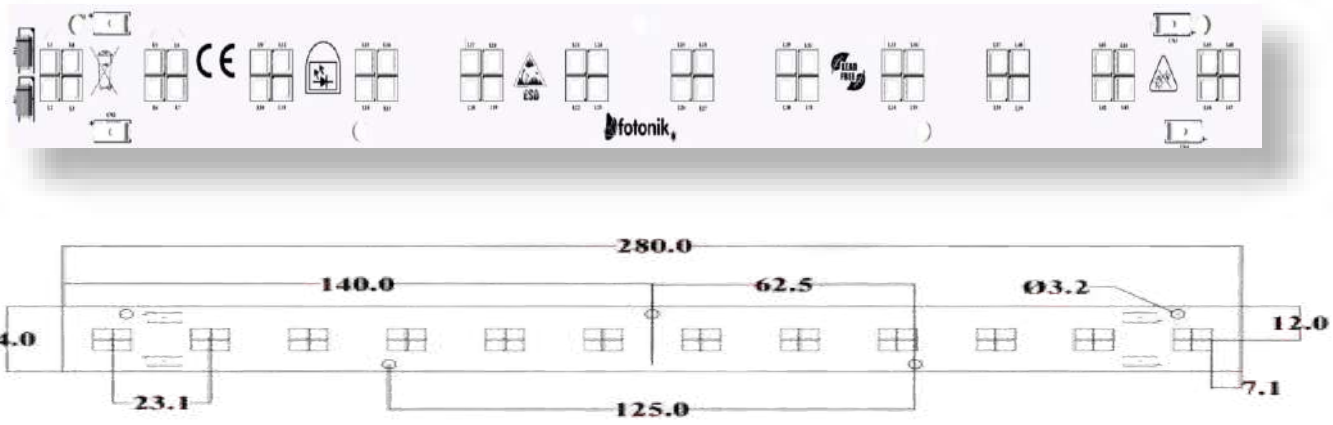
**You may tell us the code below for ordering only PCB**
**FLS-UVL-RLM-100100-G1MC16-3535-004-CV**

## Module Specifications

| | |
|---|---|
| LED Type | Prolight |
| LED Quantity | 4 |
| Peak Wavelenght (nm) | 309 |
| Radiometric Power (mW) | 42 |
| Module Operating Voltage (V) | 13,6 |
| Module Operating Current (mA) | 40 |
| Branch Operating Current (mA) | 20 |
| Module Power (W) | 0,54 |
| Dimension | 100mm x 100mm |
| Compatible Driver | 24V |

*Radiometric power tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.




## FLS-UVL-LLM-280024-AB0C-048-309-CV/CC

### SPECIFICATIONS

- Default driving method is constant voltage or constant current input
- Wavelength from 303 up to 315 nm, typical 309 nm
- This module is optional and can be connected as 2 Series 12 Parallel or 2 Series 24 Parallel.
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +45 °C
- Storage Temperature -40 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 10,000 hours
- 2-year limited warranty

### STANDARTS

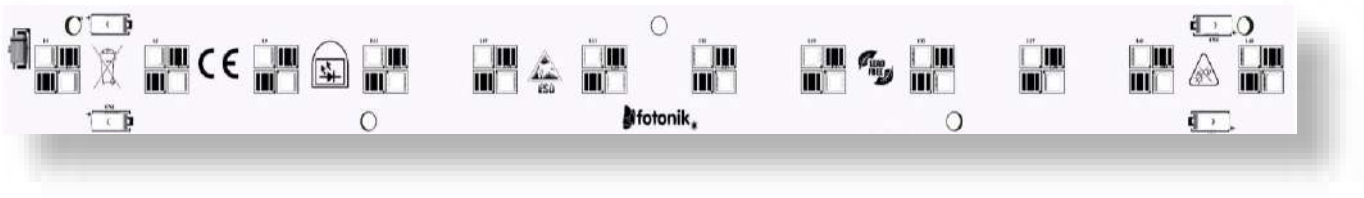
**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

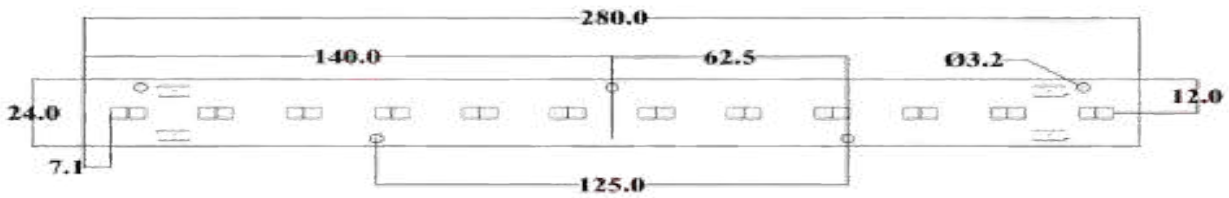
**You may tell us the code below for ordering only PCB**
**FLS-UVL-LLM-280024-G1MC16-3535-048-CV**

| Module Specifications | | |
|---|---|---|
| LED Type | Prolight | |
| LED Quantity | 24 | 48 |
| Peak Wavelenght (nm) | 309 | |
| Radiometric Power (mW) | 79,2 | 158,4 |
| Module Operating Voltage (V) | 24 | |
| Module Operating Current (mA) | 250 | 500 |
| Branch Operating Current (mA) | 20 | 20 |
| Module Power (W) | 8,4 | 16,8 |
| Dimension | 280mm x 24mm | |
| Compatible Driver | 24V | |
| Compatible Driver | 12W-250mA | 20W-500mA |

*Radiometric power tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.




## FLS-UVL-LLM-280024-AC0B-048-278-CV/CC

### SPECIFICATIONS

- Default driving method is constant voltage or constant current input
- Wavelength from 278 up to 275 nm, typical 280 nm
- This module is optional and can be connected as 2 Series 3 Parallel or 2 Series 6 Parallel.
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +45 °C
- Storage Temperature -40 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 10,000 hours
- 2-year limited warranty

## STANDARTS

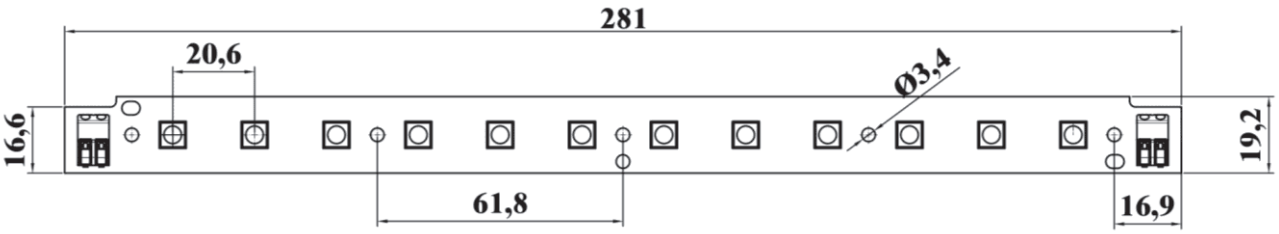
**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-UVL-LLM-280024-G1MC16-3535-048-CV**

| Module Specifications | | |
|---|---|---|
| LED Type | Prolight | |
| LED Quantity | 12 | 24 |
| Peak Wavelenght (nm) | 278 | |
| Radiometric Power (mW) | 126 | 252 |
| Module Operating Voltage (V) | 24 | |
| Module Operating Current (mA) | 250 | 500 |
| Branch Operating Current (mA) | 83,3 | 83.3 |
| Module Power (W) | 6 | 12 |
| Dimension | 280mm x 24mm | |
| Compatible Driver | 24V | |
| Compatible Driver | 6W-250mA | 12W-500mA |

*Radiometric power tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.


## FLS-UVL-LLM-281019-AC0B-012-278-CV/CC

### SPECIFICATIONS

- Default driving method is constant voltage or constant current input
- Wavelength from 278 up to 275 nm, typical 280 nm
- This module is optional and can be connected as 3 Series 4 Parallel.
- MCPCB used as PCB material
- Thermal Conductivity ≥1 W/m-K
- Operating Temperature from -40 °C up to +45 °C
- Storage Temperature -40 °C up to +80 °C
- Simple installation (e.g. push)
- Long life-time > 10,000 hours
- 2-year limited warranty

## STANDARTS

**IEC 62031 / IEC 62471 / IEC 61547 / IEC 61000-4-2**

**You may tell us the code below for ordering only PCB**
**FLS-UVL-LLM-281019-G1F416-3535-012-CV**

| Module Specifications | |
|---|---|
| LED Type | Prolight |
| Compatible Lens | LEDIL Violet |
| LED Quantity | 12 |
| Peak Wavelenght (nm) | 278 |
| Radiometric Power (mW) | 113,6 |
| Module Operating Voltage (V) | 18 |
| Module Operating Current (mA) | 350 |
| Branch Operating Current (mA) | 87.5 |
| Module Power (W) | 6.3 |
| Dimension | 281mm x 19mm |
| Compatible Driver | 18V |
| Compatible Driver | 10W-350mA |

*Radiometric power tolerance of ±10% on intensity measurements.*

ProLight Opto LED's inside.

ASCERT Certification

SERTİFİKA

Bu Sertifika,

FOTONİK TEKNOLOJİ VE MÜHENDİSLİK SANAYİ TİCARET ANONİM ŞİRKETİ

Anbar Mahallesi 2973. Sokak A2 Blok No:11/D Melikgazi/Kayseri

kuruluşunun,

Işınlama, Elektromedikal ve Elektroterapi ile ilgili Cihazların İmalatı (Elektrokardiyograf Cihazı, İşitme Cihazı, Radyoloji Cihazı, Röntgen Cihazları, X, Alfa, Beta, Gama, Mor Ötesi ve Kızıl Ötesi Işınların Kullanımına Dayalı Cihazlar vb.), Deşarj Ampulü, Mor Ötesi veya Kızıl Ötesi Ampul, Ark Ampulü, Tungsten Halojen Filamentli Ampul, Diğer Filamentli Ampul ile Fotoğrafçılıkta Kullanılan Flaş Ampulü, Flaş Küpü ve Benzerlerinin İmalatı, Avize, Aplik ve Diğer Elektrikli Aydınlatma Armatürleri, Sahne, Fotoğraf veya Sinema Stüdyoları İçin Projektörler ve Spot Işıkları, Elektrikli Masa Lambaları, Çalışma Lambaları, Abajur vb. Lambaların İmalatı (Süsleme İçin Işıklandırma Setleri Dahil), BYS Diğer Lamba ve Aydınlatma Armatürleri ile Lambaların, Aydınlatma Armatürü ve Benzerlerinin Aksam ve Parçalarının İmalatı (Cam veya Plastikten Olanlar Hariç)

Kapsamında,

ISO 45001:2018

İş Sağlığı ve Güvenliği Yönetim Sistemi Standardının şartlarına uyan bir yönetim sistemi kurduğunu ve uyguladığını onaylamak üzere verilmiştir.

| | |
|---|---|
| İlk Yayın Tarihi | : 04.09.2020 |
| Belge Tarihi | : 04.09.2020 |
| Belge Periyodu | : 3 Yıl |
| Sertifika Bitiş Tarihi | : 03.09.2021 |
| Sertifika No | : 10.2020.1035 |

Best Quality Services

Sertifika Onayı

İŞ SAĞLIĞI VE GÜVENLİĞİ YÖNETİM SİSTEMİ • SERTİFİKA • CERTIFICATE • ASCERT • ZERTIFIKAT • CERTIFICAT

CERTIFICATE

OF REGISTRATION

CERTIFIED STAUNCHLY MANAGEMENT SYSTEM

*This is to Certify that the*

*Medical Devices – Quality Management System*

*of*

FOTONİK TEKNOLOJİ VE MÜHENDİSLİK SANAYİ TİCARET ANONİM ŞİRKETİ

ANBAR MAH. 2973. SOK. A2 BLOK NO:11/D
MELİKGAZİ / KAYSERİ / TÜRKİYE

has been independently assessed and is compliant with the requirements of

ISO 13485:2016

This Certificate is applicable to the following product or service ranges:

PRODUCTION OF IRRADIATION, ELECTROMEDICAL AND ELECTROTHERAPY RELATED DEVICES (ELECTROCARDIOGRAPHY DEVICE, HEARING AID, RADIOLOGY DEVICE, X-RAY DEVICES, X, ALPHA, BETA, GAMA, DEVICES BASED ON THE USE OF BEYOND PURPLE AND INFRARED RAYS)

IŞINLAMA, ELEKTROMEDİKAL VE ELEKTROTERAPİ İLE İLGİLİ CİHAZLARIN İMALATI(ELEKTROKARDİYOGRAF CİHAZI, İŞİTME CİHAZI, RADYOLOJİ CİHAZI, RÖNTGEN CİHAZLARI, X, ALFA, BETA, GAMA, MORÖTESİ VE KIZILÖTESİ IŞINLARIN KULLANIMINA DAYALI CİHAZLAR)

*:: Certificate No :: TR53129H*

| | |
|---|---|
| Date of initial registration | 04 September 2020 |
| Date of this Certificate | 04 September 2020 |
| Surveillance audit on or before | 03 September 2021 |
| Recertification Due / Certificate expiry | 03 September 2023 |

This Certificate is property of Staunchly Management & System Services Ltd. and remains valid subject to satisfactory surveillance audits.

*Emmanuel ADEMOSU*
*Director*

STAUNCHLY MANAGEMENT AND SYSTEM SERVICES LIMITED

Labyrinth Business Centre, 42 Middle Hill Gate, Stockport, Great Manchester, England SK1 3DG

Company Registered in England and Wales with Company Number 11498803

IAS ACCREDITED IAF

◆ ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

CERTIFICATE IQR CERTIFICATION

FOTONİK TEKNOLOJİ VE MÜHENDİSLİK SANAYİ TİCARET ANONİM ŞİRKETİ

YILDIRIM BEYAZIT MAH. ASIK VEYSEL BLV. E.Ü. TGB İDARE VE KULUCKA 4 APT. NO:67/3 İÇ KAPI NO:41 MELİKGAZİ / KAYSERİ / TÜRKİYE

*Has been assessed and found to Comply with the Requirements of:*
*Denetlenmiş ve aşağıdaki standartlara gerekliliklerine uygunluğu görülmüştür:*

ISO 9001:2015

*The Quality Management System is applicable to:*
*Kalite Yönetim Sistemi:*

MANUFACTURE OF DEVICES RELATED TO IRRADIATION, ELECTROMEDICAL AND ELECTROTHERAPY

IŞINLAMA, ELEKTROMEDİKAL VE ELEKTROTERAPİ İLE İLGİLİ CİHAZLARIN İMALATI

Certificate Number: QMS-10313 / Belge Numarası: QMS-10313
Initial Certification Date: 23.06.2020 / İlk Belgelendirme Tarihi: 23.06.2020
Certification Period: 3 Years / Belgelendirme Periyodu: 3 Yıl
Certificate Validity Date: 22.06.2021 / Belge Geçerlilik Tarihi: 22.06.2021

IQR IAS ACCREDITED Management System Certification Body MSCB-135

IQR ULUSLARARASI BELGELENDİRME HİZMETLERİ LTD.ŞTİ.

CERTIFICATE IQR CERTIFICATION

FOTONİK TEKNOLOJİ VE MÜHENDİSLİK SANAYİ TİCARET ANONİM ŞİRKETİ

YILDIRIM BEYAZIT MAH. ASIK VEYSEL BLV. E.Ü. TGB İDARE VE KULUCKA 4 APT. NO:67/3 İÇ KAPI NO:41 MELİKGAZİ / KAYSERİ / TÜRKİYE

*Has been assessed and found to Comply with the Requirements of:*
*Denetlenmiş ve aşağıdaki standartlara gerekliliklerine uygunluğu görülmüştür:*

ISO 14001:2015

*The Environmental Management System is applicable to:*
*Çevre Yönetim Sistemi:*

MANUFACTURE OF DEVICES RELATED TO IRRADIATION, ELECTROMEDICAL AND ELECTROTHERAPY

IŞINLAMA, ELEKTROMEDİKAL VE ELEKTROTERAPİ İLE İLGİLİ CİHAZLARIN İMALATI

Certificate Number: EMS-10313 / Belge Numarası: EMS-10313
Initial Certification Date: 23.06.2020 / İlk Belgelendirme Tarihi: 23.06.2020
Certification Period: 3 Years / Belgelendirme Periyodu: 3 Yıl
Certificate Validity Date: 22.06.2021 / Belge Geçerlilik Tarihi: 22.06.2021

IQR IAS ACCREDITED Management System Certification Body MSCB-135

IQR ULUSLARARASI BELGELENDİRME HİZMETLERİ LTD.ŞTİ.

RoHS compliant LVD EMC CE MADE IN TURKEY CERTIFIED ISO 9001:2015 COMPANY CERTIFIED ISO 14001:2015 COMPANY CERTIFIED ISO 45001:2018 COMPANY MEDICAL DEVICES ISO ISO 13485:2016

# fotonik

*Creates Intelligent Photons*

UVA

UVB

UVC

9001:2015 14001:2015 45001:2018 13485:2016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**Fabrika/Factory:** Anbar Mah. 2973. Sokak A2 Blok No:11/D, M.Gazi/KAYSERİ +90 555 090 12 38

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