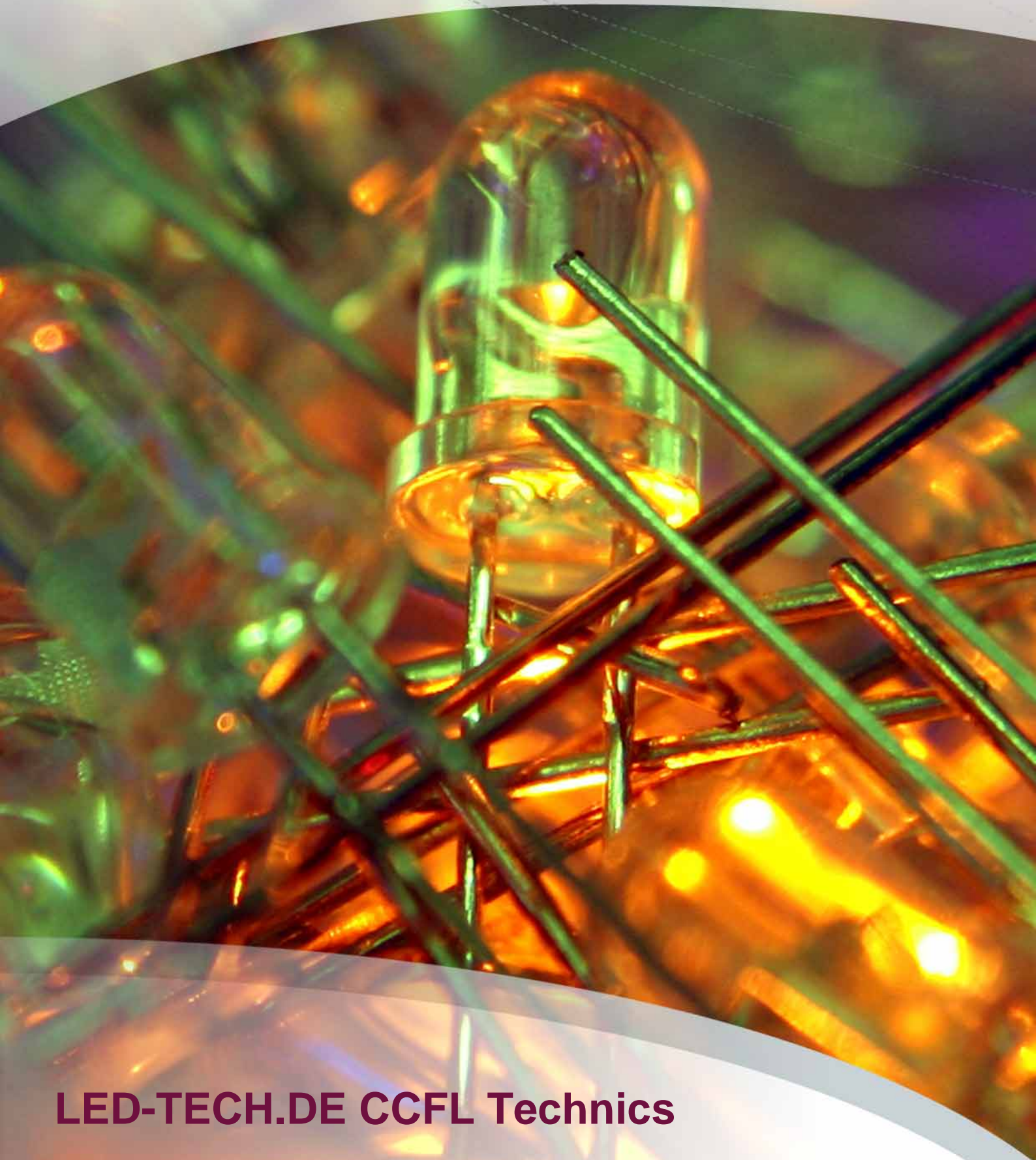


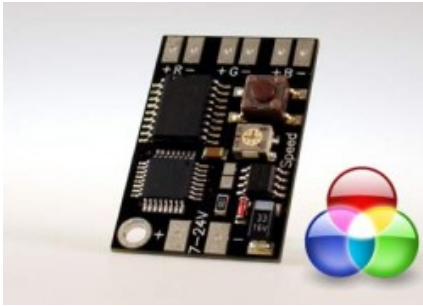
LED-TECH.DE

OPTOELECTRONICS



LED-TECH.DE CCFL Technics

MultiLine RGB Mini Controller V2.0



Part Number: LT-0215

Housing Color: black

V typ.: 7-24 V

New upgrade version with 800mA/channel!

We have re-designed our smallest RGB controller. For using high power LEDs 500mA were not adequate in every case. The new version 2.0 can now drive LEDs up to 800mA per channel. The module has the same dimensions as its forerunner.

The new module comes on a black PCB instead of green now and can also be driven in two different modes that can be changed by setting a little soldering bridge on the PCB:

A) The onboard potentiometer adjusts the fading times between two colors. This kind of fading is used by most of the common controllers and is the standart setting of this controller.

New B) The potentiometer can adjust the durability of colors which leads to less intensiv fading (mixed) colors. The fading sequence to the next color is done in a fixed time of 1-2 seconds and the main focus is set on HOLDING a color. A very nice effect.

Technical data:

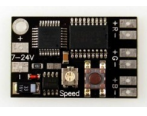
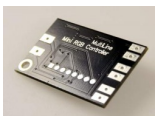
- Ready-to-use SMD PCB
- Input: 7–24V
- Charging rate (without charge): 20mA
- Time interval (1 flow path): 5 sec. up to 7min. (adjustable)
- Output current: 800mA per channel
- Dimensions: 40x26mm
- Uses common ANODE (Plus)

Completely new in version 2.0:

- Wrong polarity protection on input side
- Wrong polarity protection on output side
- Mounting hole (can also be glued)
- 2 operation modes
- Fading now also include WHITE mixed color
- hardware transparency for max. flexibility (read below)

Controller data:

- Controller: ATMEGA48
- Takt: 8MHz (internal resonator, internal reset)
- PWM channel RED: PD6
- PWM channel GREEN: PB1
- PWM channel BLUE: PB2
- Start-Stop-Pause-Button: PC0 (after GND, internal PullUp)
- Speed-Potentiometer: ADC7



Hardware transparency:

The bottom side of the module shows 8 record pads. Interested users with hardware for programming and flashing the IC with own software (BASCOS code) can use these pads for access. The 8 pads are connected as follows:

1. MISO
2. VCC
3. SCK
4. MOSI
5. RST
6. GND
- 7.+8. not used

When the module is stopped at a special color and gets switched off it will show the same color when switched on again. The same effect appears when the module was in fading mode.

Tipp 1: You can find a compatible housing [here](#).

30cm Cold Cathodes (4in1-Set) (UV)



Part Number: LT-0237
Housing Color: transparent
Emitting Color: UV
Nanometer: 368

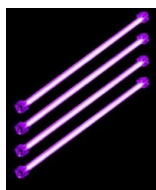
New: 4 CCFLs with 2 inverters and supply in one package!

With the 4in1 sets you economize the costs of 1 inverter and 1 cathode in comparison to two 2n1 sets!

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (4in1-Set) (blue)



Part Number: LT-0238
Housing Color: transparent
Emitting Color: blue
Nanometer: 460

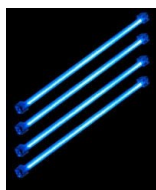
New: 4 CCFLs with 2 inverters and supply in one package!

With the 4in1 sets you economize the costs of 1 inverter and 1 cathode in comparison to two 2n1 sets!

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (4in1-Set) (red)



Part Number: LT-0239
Housing Color: transparent
Emitting Color: red
Nanometer: 620

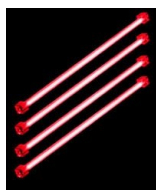
New: 4 CCFLs with 2 inverters and supply in one package!

With the 4in1 sets you economize the costs of 1 inverter and 1 cathode in comparison to two 2n1 sets!

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (4in1-Set) (green)



Part Number: LT-0240
Housing Color: transparent
Emitting Color: green
Nanometer: 528

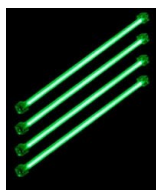
New: 4 CCFLs with 2 inverters and supply in one package!

With the 4in1 sets you economize the costs of 1 inverter and 1 cathode in comparison to two 2n1 sets!

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



10cm Cold Cathodes (2in1-Set) (UV)



Part Number: LT-0250

Housing Color: transparent

Emitting Color: UV

Nanometer: 368

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



10cm Cold Cathodes (2in1-Set) (red)



Part Number: LT-0251

Housing Color: transparent

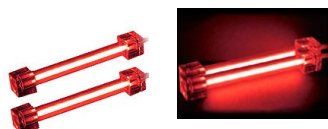
Emitting Color: red

Nanometer: 620

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



10cm Cold Cathodes (2in1-Set) (blue)



Part Number: LT-0252

Housing Color: transparent

Emitting Color: blue

Nanometer: 460

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



10cm Cold Cathodes (2in1-Set) (green)



Part Number: LT-0253

Housing Color: transparent

Emitting Color: green

Nanometer: 528

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (2in1-Set) (UV)



Part Number: LT-0262

Housing Color: transparent

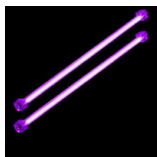
Emitting Color: UV

Nanometer: 368

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (2in1-Set) (red)



Part Number: LT-0263

Housing Color: transparent

Emitting Color: red

Nanometer: 620

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (2in1-Set) (blue)



Part Number: LT-0264

Housing Color: transparent

Emitting Color: blue

Nanometer: 460

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (2in1-Set) (green)



Part Number: LT-0266

Housing Color: transparent

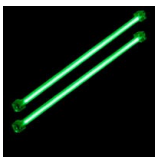
Emitting Color: green

Nanometer: 528

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



30cm Cold Cathodes (2in1-Set) (white)



Part Number: LT-0269

Housing Color: transparent

Emitting Color: white

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



CCFL Replacement Inverter



Part Number: LT-0458

Housing Color: black

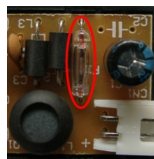
V typ.: 12 V

Replacement inverter for Sharkoon cold cathodes. The current generation uses high quality inductors that guaranty a long lifetime.

Dimensions (H/W/D): 2.2 x 3.0 x 8.5cm

Tips for usage:

- 1) Please always avoid covering the upper air circulation holes.
- 2) Please avavoid wrong polarities at the 12V input socket. This could cause a fuse reaction which would avert further usage till repair of same fuse.



10cm Cold Cathodes (2in1-Set) (white)



Part Number: LT-0466

Housing Color: transparent

Emitting Color: white

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Two CCFLs with an extremely long life span. Spending much more light than a common neon lamp of same size. This package also includes a dual inverter for connecting both cold cathodes. Of course cables are attached, too.

If you need help with the installation please have a look at the installation manual [here](#).



10cm Cold Cathode (single) (UV)

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd).

Replacement cold cathode (10cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

Part Number: LT-0467

Housing Color: transparent

Emitting Color: UV

Nanometer: 368

10cm Cold Cathode (single) (red)



Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (10cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

Part Number: LT-0468

Housing Color: transparent

Emitting Color: red

Nanometer: 620

10cm Cold Cathode (single) (blue)

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (10cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

Part Number: LT-0469

Housing Color: transparent

Emitting Color: blue

Nanometer: 460

10cm Cold Cathode (single) (green)



Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (10cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

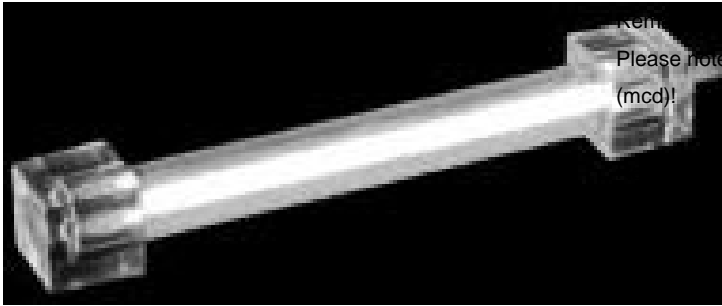
Part Number: LT-0470

Housing Color: transparent

Emitting Color: green

Nanometer: 528

10cm Cold Cathode (single) (white)



Remains cold cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela
(mcd)!

10cm cold cathode (10cm) with power cable for cheap and easy testing of
without buying expensive sets. Please note that you need an inverter to
cold cathode.

Part Number: LT-0471

Housing Color: transparent

Emitting Color: white

30cm Cold Cathode (single) (red)



Part Number: LT-0472

Housing Color: transparent

Emitting Color: red

Nanometer: 620

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (30cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

30cm Cold Cathode (single) (blue)



Part Number: LT-0473

Housing Color: transparent

Emitting Color: blue

Nanometer: 460

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available.
Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (30cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

30cm Cold Cathode (single) (green)



Part Number: LT-0475

Housing Color: transparent

Emitting Color: green

Nanometer: 528

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (30cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

30cm Cold Cathode (single) (white)



Part Number: LT-0476

Housing Color: transparent

Emitting Color: white

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (30cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

30cm Cold Cathode (single) (UV)



Part Number: LT-0479

Housing Color: transparent

Emitting Color: UV

Nanometer: 368

Remark: Cathode generation with ultrabright 18.000 cd/qm (typ.) ex stock available. Please note that these value is to be understood in huge Candela and not Millicandela (mcd)!

Replacement cold cathode (30cm) with power cable for cheap and easy testing of other colors without buying expensive sets. Please note that you need an inverter to light up this cold cathode.

Imprint



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