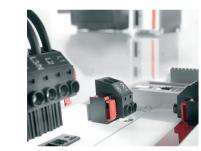
## **OMNIMATE** – **device connectivity** and electronics housings



#### **OMNIMATE Signal**

includes PCB terminals and PCB plug-in connectors for automation and systems engineering equipment, as well as sensor-actuator interfaces and power supplies.



#### **OMNIMATE** Power

PCB plug-in connectors and feedthrough terminals for use in power electronics – particularly in inverters, frequency converters, servo drives, heavy-duty power supplies and motor starters.



### **OMNIMATE** Housing -

The perfect enclosures for industrial electronics, for mounting on 35 mm top-hat rails (DIN rails) in the electrical cabinet. Used for controller, signal conversion and machine safety applications.



## OMNIMATE Services -

Take advantage of our global 72-hour sample service free of charge in the online catalogue or at www.sample-service.com. For the best design-in-process – from specification stage to full component integration.

#### Weidmüller - Partner in Industrial Connectivity.

As experienced experts we support our customers and partners around the world with products, solutions and services in the industrial environment of power, signal and data. We are at home in their industries and markets and know the technological challenges of tomorrow. We are therefore continuously developing innovative, sustainable and useful solutions for their individual needs.

Together we set standards in Industrial Connectivity.

## You are creating the future with LED lighting systems We are thinking about the future in terms of accurate connections Let's connect.



## Forward-looking connection system for LED lighting and lighting controls

Trends towards energy efficiency and long service life are emerging in lighting technology. From streetlights and outdoor lighting, to lighting at the workplace, or in the home, the use of LED technology is gaining in importance. It is highly effective and offers a typical service life of up to 50,000 operating hours. But while LED lighting requires virtually no maintenance for a number of years, it does place increased demands on individual electronic components. You therefore have to address not only the issues of longevity and a higher ambient temperature, but also consider suitability for efficient mass production.

Our tried and tested OMNIMATE device connection system is here to help. As an industrial connectivity partner, Weidmüller has been synonymous with quality, efficiency and competence for over 50 years. The extensive product range of our OMNIMATE connection system provides reliability and added value over the entire LED service life. Power supply, lighting control or lights – PCB terminals and PCB plug-in connectors from Weidmüller provide unique solutions for your devices.

The OMNIMATE Signal, OMNIMATE Power and OMNIMATE Housing product groups offer the right connection solution for your application. The Weidmüller online configurator on our website provides free 3D CAD downloads and our unique 72-hour OMNIMATE sample service, delivering impressive convenience and speed. We guarantee that you'll have your requested sample within 72 hours. Let's connect.

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www.weidmueller.com



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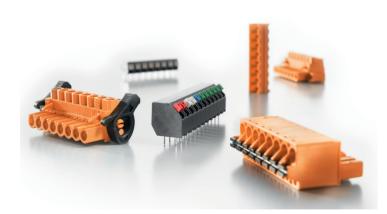
## 1. Power supply

# You need safe and durable device connections for the current and voltage requirements in all LED applications. Terminals and plug-in connectors from the OMNIMATE Signal series provide maximum safety and numerous features. For example, you can depend on the connector face or optional coding elements to prevent the wrong parts being connected together. The plug-in connectors can be made even more secure, using clips, locks or screws. Depending on your application, you can choose between spring (PUSH IN) or screw connections. For local error-free wiring, you can have all OMNIMATE Signal products printed with your own connection designations. The connection voltage is between 10 and 48 V DC or up to 240 V AC, depending on what you need for your application. And so that you can be sure

of reliable, secure, fastening, we offer plug connections with an

additional screw flange or lock and release lever.

For SMD assembled printed circuit boards is the connection system also available as an SMD version or THR version. The BLZP and BLF OMNIMATE Signal plug-in connectors, in size 5.08 mm with screw or PUSH IN connection, offer a fast and firm plug-in connection for the alternating voltage input. The LSF PCB terminals in sizes 3.50 mm to 7.62 mm are a non-pluggable connection solution. They can be used in either the wave solder process do not make any changes to this sentence, it sounds fine as is. Items PS 3.5, LM 3.5, LM 5.00, LM 5.08 and LS 5.08 can be used for a screw-wire connection.



PCB terminals and connectors, in 5.08 pitch, with PUSH IN or screw wire connections

## 11.70

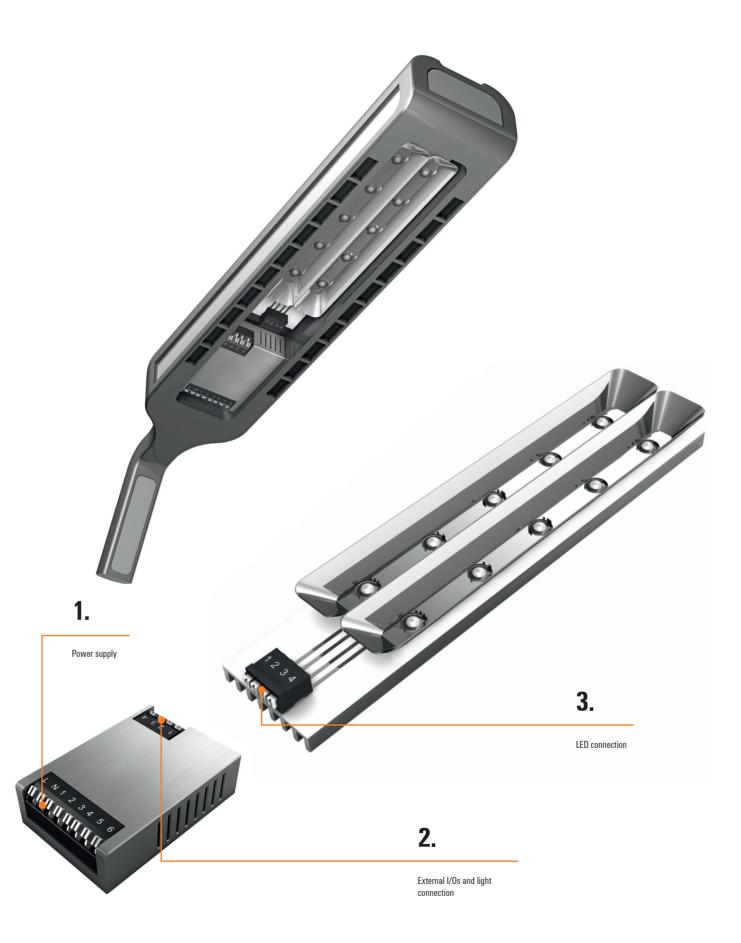
## External I/Os and light connection

Your LED operating device needs input interfaces for light sensors, dimmers, BUS systems (such as EIB, KNX, LON or DALI) and output interfaces for connecting the LED modules. The trend for these devices is moving towards them being even more compact, which means that they need to be suitable for a whole variety and number of installation circumstances. Installation of smaller and smaller LED lights, in particular, is placing tougher demands on the size and operability of the connection system used. Shorter installation times and significantly reducing the likelihood of errors will obviously deliver optimized connections for your operating devices.

The OMNIMATE LSF series of PCB terminals and plug-in connectors in size 3.81 mm are perfectly suited for simple and safe operation in tight installation situations. They provide a large clamping range of 0.20 to 1.50 mm² and a very high current-carrying capacity of up to 17.5 A. Fast and safe contacts are made using the proven PUSH IN connection technology, which enables a direct connection without the use of any tools. The conductors are loosened quickly and easily with a built-in push-button.



Connectors, in 3.81 pitch, with PUSH IN or screw wire connections



## 3. LED connection

You can gain optimum efficiency for your LED modules, strips and lights by avoiding any shade from neighbouring components. The heat produced by the lights also has to be managed. If you often use aluminium composite PCBs, your choice of suitable connection components is tough. With high-power LED modules in particular, e.g. for use in streetlights and outdoor lighting, very compact connection components are needed.

The BCF 3.81 OMNIMATE plug-in connector variant with a low height of just 7.9 mm is extremely flat, yet can connect conductors of up to 1.50 mm<sup>2</sup>, including the wire-end ferrule. Thanks to PUSH IN connection technology, the prepared conductors can be connected in no time and can be trusted to withstand vibrations. LSF-SMD SMD PCB terminals meet the requirements for fully automatic surface mounting. Equipped with PUSH IN connection technology, this genuine SMD variant is a valuable addition to the existing range of reflow-capable LSF SMT PCB terminals with THR soldering processes. Applications on glass, ceramic or aluminium composite PCBs can now also be connected with the PUSH IN connection system. The 3.50 mm size enables maximum packing density with a maximum connection cross-section of 1.50 mm<sup>2</sup>. The OMNIMATE LSF series of PCB terminals and 3.81 mm plug-in connectors can be easily identified through individual printing or colour push-buttons.



PCB terminals for fully automatic assembly using reflow soldering (SMT), with PUSH IN wire connections

## Looking for more detailed information?

Enter one of the search terms below into our online catalogue, at http://catalog.weidmueller.com

#### 1. Power supply

OMNIMATE Signal connector BL 3.5, BCZ 3.81, BCF 3.81 BLZP 5.08, BLF 5.08

OMNIMATE Signal PCB terminals LSF-SMT 3.5 (3.81), (5.08) LM 3.5, LM 5.08, OMNIMATE Signal PCB terminals LSF-SMT 3.5 (3.81), (5.08) LM 3.5, LM 5.08,

3. LED connection

BLZP 5.08, BLF 5.08

OMNIMATE Signal connector

BL 3.5, BCZ 3.81, BCF 3.81,

#### 2. External I/Os and light connection

OMNIMATE Signal connector BL 3.5, BCZ 3.81, BCF 3.81 BLZP 5.08, BLF 5.08

OMNIMATE Signal PCB terminals LSF-SMT 3.5 (3.81), (5.08) LM 3.5, LM 5.08, LSF-SMD 3.5, PS 3.5

