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.

Your local Weidmüller partner can be found on our website:
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Device application analogue signal converter
You need to make exact measurements Our housing and connection systems provide all the support you need
Let’s connect.

Industrial sectors with sensitive requirements need extremely accurate measurements in their applications. These include oil and gas production, chemical and steel factories, power plants plus water-processing and waste disposal plants. Here the job is to parameterise values such as temperature, pressure, flow, level, mass, weight and use sensors to measure them as part of a continuous production process. To ensure that measurement values can be transferred within the process chain without any errors – even over long distances.

Top-quality electronic devices ensure that temperature fluctuations, electromagnetic interference, vibration and corrosion do not affect the accuracy of signal transmission and conversion. This level of accuracy can be effectively supported with special electronics housings and reliable connection systems.

We at Weidmüller are extremely familiar with the demands you place on electronics housings and connection systems. Through our extensive expertise and many years of experience in the development and production of signal converters, we meet the demands you place on electronics housings and connection systems at the highest level. With the OMNIMATE Housings, OMNIMATE Signal and OMNIMATE Power product groups, you can select precisely the right connection solution for your application.

Let’s connect.

Future-oriented housing and connection systems for analogue signal converters

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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 includes PCB terminals, 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 comprehensive service line: urgent airfreight of urgent components as well as worldwide sample service centres. For the best design-in-process – from specific stage to full component integration.

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1. **Housings**

Modern housings for electronics must meet requirements in terms of shape, functionality and visual appeal in an optimal manner. Housing systems are therefore designed in multiple stages. The development of the design begins with the customer and the desired connection technology. After determining the key properties of the housing, the housing system is designed. This begins with a sketch that is later translated into a digital model. Then, the model is further developed to ensure all functional requirements are met. The next step involves the manufacture of a prototype to confirm the design concepts and ensure the housing meets all technical requirements. Finally, the final design is fully developed and manufactured.

**Features**:
- **Easy of Maintenance**: BHZ and SHL-SMT (two parts, pluggable) offer extensive design freedom and high scalability.
- **Automatic Assembly**: All widths are compatible with automatic assembly and reflow processing across all widths.
- **FE Mounting Rail Contact**: Optional FE mounting rail contact is available to support interference-free operation.
- **Larger Net PCB Layout Surfaces**: Larger net PCB layout surfaces up to 9,000 mm² (single-sided).
- **Customisation**: Housings are available with three additional connections for alarm, communication, or control signals.
- **Modularity**: Consistent modularity in a universal design.
- **System Bus**: Integrated system bus in the TS35 standard top-hat rail.
- **Ease of Operation and Accessibility**: Optimal ease of operation and accessibility of operating and display elements.

**Applications**: The OMNIMATE CH20M electronics housing system is the best solution for your application with a quantity of one. Get personalised advice about which version is the best solution for your application. For example, we can deliver customised cable lengths starting with a length of 1 m. Depending on the application area, they are available in protection classes IP 66/67 and IP 20. SAI round plug-in connectors and multi-pole cables, M23 products have been the best-in-class for many years now.

2. **Input side – signal acquisition**

**Features**:
- **Reliable Connectors**: PCB terminals and plug-in connectors as PUSH IN or screw connections are available for signal acquisition.
- **Wire Ready Technology**: Wire Ready Technology eases connection and unique on the market due to their folded clamping yoke.
- **Versatile Solutions**: Both screw varieties are maintenance free, vibration resistant and unique on the market due to their folded clamping yoke.
- **Fully Interchangeable**: Both plug-in connectors are fully interchangeable and easy to assemble.

**Applications**: The robust SAI round plug-in connectors from Weidmüller were developed manually at the most cost-effective point. Depending on the application area, they are available in protection classes IP 66/67 and IP 20. SAI round plug-in connectors are designed for use in environments that are subject to high mechanical and environmental loads. The SAI system is the best-in-class for years to come.

3. **Power supply**

**Features**:
- **Multi-Brand Compatibility**: The OMNIMATE electronics housing system CH20M from Weidmüller offers a wide range of capabilities for faster and easier wiring. The housing system includes a wide range of possibilities for power supply, including low voltage switching equipment, high-voltage components, and other elements. In addition to this flexibility, our solutions offer you a wide range of additional advantages in your daily work.
- **Dio Plugs for Automated Assembly**: Dio Plugs for automated assembly are available in various shapes and sizes. It is easy to connect and disconnect without any effort. The OMNIMATE electronics housing system CH20M from Weidmüller offers a wide range of possibilities for power supply. For example, we can deliver customised cable lengths starting with a length of 1 m. Depending on the application area, they are available in protection classes IP 66/67 and IP 20. SAI round plug-in connectors and multi-pole cables, M23 products have been the best-in-class for many years now.

4. **Output side – control signal**

**Features**:
- **Customisable**: The OMNIMATE electronics housing system CH20M offers a wide range of capabilities for faster and easier wiring. The housing system includes a wide range of possibilities for power supply, including low voltage switching equipment, high-voltage components, and other elements. In addition to this flexibility, our solutions offer you a wide range of additional advantages in your daily work.
- **Easy Assembly**: The OMNIMATE electronics housing system CH20M offers a wide range of possibilities for power supply. For example, we can deliver customised cable lengths starting with a length of 1 m. Depending on the application area, they are available in protection classes IP 66/67 and IP 20. SAI round plug-in connectors and multi-pole cables, M23 products have been the best-in-class for many years now.

5. **SAI round plug-in connectors and multi-pole cables for field wiring**

**Features**:
- **Easy Assembly**: The OMNIMATE electronics housing system CH20M offers a wide range of possibilities for power supply. For example, we can deliver customised cable lengths starting with a length of 1 m. Depending on the application area, they are available in protection classes IP 66/67 and IP 20. SAI round plug-in connectors and multi-pole cables, M23 products have been the best-in-class for many years now.
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