

**Industrial Ethernet
IE-PCB-RJ45-SMD-C5-AI**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 1429-0
Fax: +49 5231 14292083
www.weidmueller.com



IE plug-in connectors, IP20, for copper and fibre optic cables

General ordering data

Type	IE-PCB-RJ45-SMD-C5-AI
Order No.	1455220000
Version	RJ45 PCB socket, 90°, SMD solder connection, IP20
GTIN (EAN)	4050118261516
Qty.	100 pc(s).
Packaging	Tape (Ø 330 mm); Rs = 10 ⁹ - 10 ¹² Ω

Data sheet

Industrial Ethernet IE-PCB-RJ45-SMD-C5-AI

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 1429-0
 Fax: +49 5231 14292083
 www.weidmueller.com

Technical data

Dimensions and weights

Net weight 7.2 g

Temperatures

Operating temperature -40 °C...85 °C Storage temperature
 Installation temperature

Electrical properties

Contact resistance	≤ 20 mΩ	Dielectric strength, contact / contact	≥ 1000 V DC
Insulation resistance	> 500 MΩ	Rated current	1.5 A
Rated voltage	125 V AC		

Material data

Insulating material	PA 9T	Insulating material group	II
CTI	≥ 500	UL 94 flammability rating	V-0
Contact material	Phosphorus bronze	Contact surface	Selective gold 30 μ"
Shielding material	Copper alloy	Shield surface	nickel-plated
Moisture Level (MSL)	1		

Standards

Connector standard IEC 60603-7-5 1 Certificate No. (UL) E471884

System parameters

Wiring	8-core	Outgoing elbow	90°
Number of solder pins per pole	1	Mounting onto the PCB	SMD solder connection
Solder pin length (l)	3.5 mm	Pitch in inches (P)	0.05 inch
Pitch in mm (P)	1.27 mm	Insulation resistance	> 500 MΩ
No. of poles	8	Packaging	Tape (Ø 330 mm); Rs = 10 ⁹ - 10 ¹² Ω
Pin series quantity	1	Plugging cycles	750
Protection degree	IP20	Shielding	Yes

Classifications

ETIM 6.0	EC001121	eClass 6.2	27-25-05-04
eClass 7.1	27-25-05-04	eClass 8.1	19-17-01-25
eClass 9.0	19-17-01-25	eClass 9.1	27-44-09-90

Product information

Descriptive text ordering data Other versions on request

Approvals

Approvals



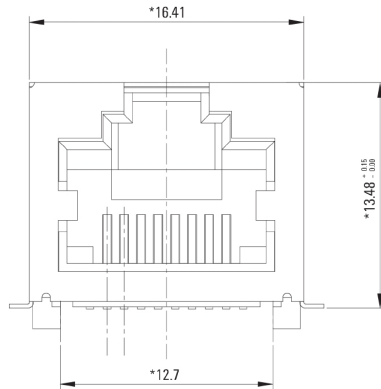
ROHS Conform

**Industrial Ethernet
IE-PCB-RJ45-SMD-C5-AI**

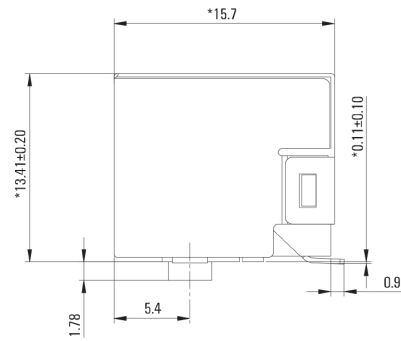
Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 1429-0
 Fax: +49 5231 14292083
 www.weidmueller.com

Drawings

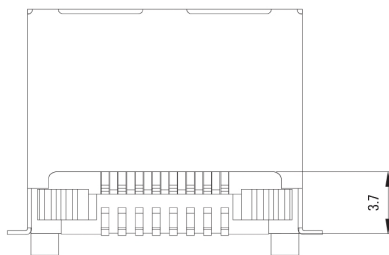
Dimensioned drawing



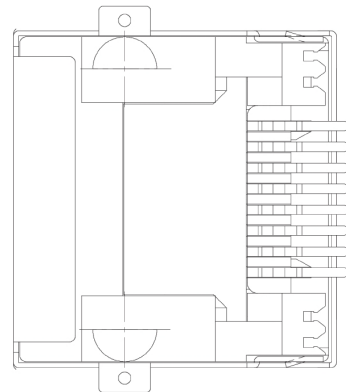
Dimensioned drawing



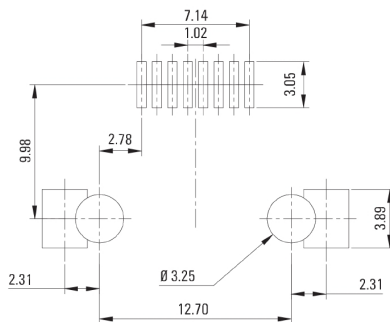
Dimensioned drawing



Dimensioned drawing



PCB design



Recommended reflow soldering profile

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com



Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically $\leq +3\text{K/s}$. In parallel the solder paste is ‚activated‘. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at $\geq -6\text{K/s}$ solder is cured. Board and components cool down while avoiding cold cracks.