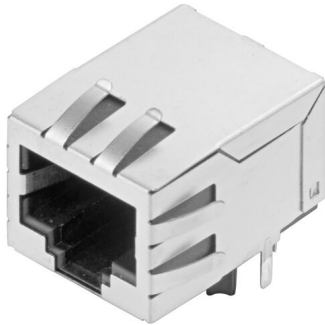


## RJ45G1 T1D 3.3E4N TY

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)



RJ45 transmitter sockets (magnetics) for gigabit applications (1000 base-T) with integrated compensation actively counteracts inductive and capacitive couplings and saves space on the PCB.

The product range encompasses the following designs:

- 90°, lying (horizontal) and 180°, standing (vertical)
- latch up / latch down
- THT, THR or SMD soldering processes
- Wide range of different design types, also with integrated LEDs and shield contact tabs
- Transmission rates of up to 1 Gbps
- Packed either in a tray (TY) or on a roll (tape-on-reel, RL)
- Compatible with modular RJ45 connector according to ANSI / TIA-1096-A and IEC 60603
- Dielectric strength  $\geq 1500$  V AC RMS (2250 V AC peak value) according to IEEE 802.3
- Dielectric strength  $\geq 1500$  V AC (peak value) or  $\geq 1500$  V DC according to IEC 60603
- Compliance with IEEE 802.3 requirements (1000Base-T, 1 Gbps, IEEE 802.3ab or 100Base-Tx, 100 Mbps, IEEE 802.3u) Properties and advantages:
- Extended temperature range of  $-40$  °C to  $+85$  °C for maximum performance
- Reinforced gold layer ( $30\mu\text{m}$ ) for improved corrosion protection
- At least 0.3mm stand-off ensures a perfect soldering result

### General ordering data

Version	OMNIMATE Data - RJ45 transformer jack, PCB plug-in connector, THT solder connection, 90°, bottom, 6 tabs, No, Plugging cycles: 750, Number of poles: 10, PA 66, 30...80 $\mu\text{m}$ Ni / $\geq 30$ $\mu\text{m}$ Au , Tray (manual assembly)
Order No.	<a href="#">2564420000</a>
Type	RJ45G1 T1D 3.3E4N TY
GTIN (EAN)	4050118572919
Qty.	120 items
Packaging	Tray (manual assembly)

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## Technical data

## Approvals

Approvals	CURUS
ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (cURus)	E471884

## Dimensions and weights

Depth	21.35 mm	Depth (inches)	0.8405 inch
Height	16.8 mm	Height (inches)	0.6614 inch
Height of lowest version	13.5 mm	Width	15.9 mm
Width (inches)	0.626 inch	Net weight	7.05 g

## Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

## System specifications

Number of poles	10	LED	No
Solder pin length (l)	3.3 mm	Mounting onto the PCB	THT solder connection
Pitch in inches (P)	0.050 "	Shielding material	Brass
Shielding	Yes	Side termination, characteristic	Solder flange
Solder eyelet hole diameter tolerance (D)± 0.1 mm		Transmission rate	1000 Mbps
Number of solder pins per pole	1	Type of connection	Solder connection
Solder eyelet hole diameter (D)	0.9 mm	Product family	OMNIMATE Data - RJ45 transformer jack
Pitch in mm (P)	1.27 mm	Protection degree	IP20
Plugging cycles	750	Outgoing elbow	90°
Shield surface	nickel-plated	Shield tabs	6 tabs
Performance-Category	1000 Mbps	Soldering process	Manual soldering, Wave soldering
Latch option	bottom	Solder pin dimensions	Octagonal
Tolerance of solder pin position	± 0.15 mm		

## Electrical properties

Dielectric strength, contact / shield	1500 V DC	Dielectric strength, contact / contact	1000 V DC
Insulation resistance	≥ 500 MΩ	Nominal voltage	125 V
Rated current	1.5 A		

## Standards

Connector standard	IEC 60603-7
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## Material data

Insulating material	PA 66	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 500	Insulation resistance	≥ 500 MΩ
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact base material	Phosphorus bronze	Contact material	Cu-alloy
Contact surface	Gold over nickel	Layer structure of plug contact	30...80 μ" Ni / ≥ 30 μ" Au
Storage temperature, min.	-40 °C	Storage temperature, max.	85 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	85 °C

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**Technical data****Packing**

Packaging	Tray (manual assembly)	VPE length	322.00 mm
VPE width	194.00 mm	VPE height	69.00 mm

**Important note**

Notes

**Classifications**

ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

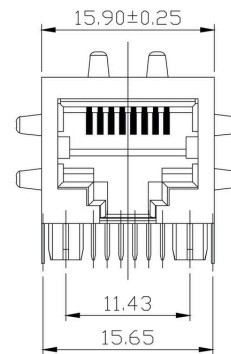
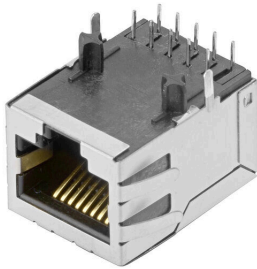
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Drawings

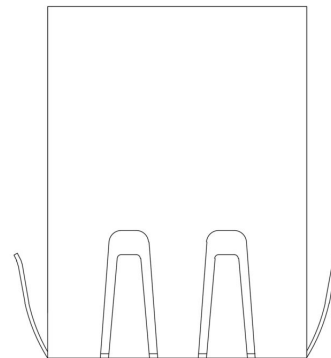
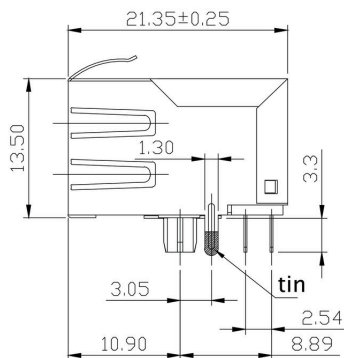
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Dimensioned drawing



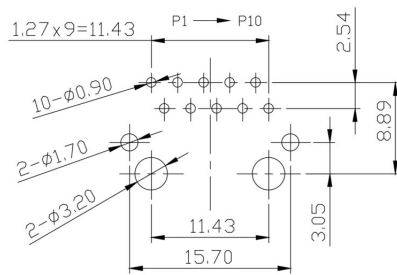
Dimensioned drawing

Dimensioned drawing

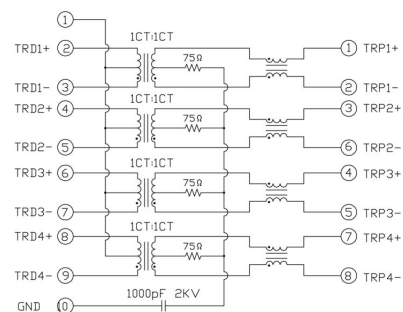


PCB design

Wiring diagram



PCB Layout



RJ45G1 T1D 3.3E4N TY

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Drawings

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Code	Value	Description
RJ45	G1	RJ45G1 R1U 3.2E4GY/GY TY
R	1	Through Hole Reflow - THR
U	3.2	Solder Pin length: 3.2 mm
E	4	Contact surface thickness: 4 (30µm)
GY/GY	TY	LED: Green-Yellow/Green-Yellow
	TY	Packaging: Tray in box (manual assembly)
	RL	Packaging: Tape on Reel (automated assembly)
	Y/G	LED: Yellow/Green
	G/Y	LED: Green/Yellow (standard)
	GY/GY	LED: Green-Yellow/Green-Yellow
	G/G	LED: Orange/Green
	R/O	LED: Red/Orange
	...	LED: ... (further combinations possible)
	N	LED: without LED
	4	Contact surface thickness: 1 = 3µm, 2 = 6µm, 3 = 15µm, 4 = 30µm, 5 = 50µm
	E	EMI tabs (ground fingers): E = with EMI tabs
	N	EMI tabs (ground fingers): N = without EMI tabs
	3.2	Solder Pin length: 3.2 mm
	1.6	Solder Pin length: 1.6 mm
	D	Solder Pin length: SMD
	U	Direction, latch style: Horizontal (90°, side entry), latch up
	D	Direction, latch style: Horizontal (90°, side entry), latch down
	V	Direction, latch style: Vertical (180°, top entry)
	Y	Direction, latch style: Diagonal (45°), latch up
	1	Number of Ports: 1 Port
	12; 14; ...	Number of Ports: multi ports side by side, Multiport
	21; 41; ...	Number of Ports: multi ports about each other, Multilevel
	R	Assembly on PCB: Through Hole Reflow - THR
	S	Assembly on PCB: Soldering process: Wave or Reflow soldering
	T	Assembly on PCB: Surface Mount Technology - SMT
		Assembly on PCB: Soldering process: Reflow soldering
		Assembly on PCB: Through Hole Technology - THT
		Assembly on PCB: Soldering process: Wave
	C5	Performance Category: Category 5
	C6	Performance Category: Category 6
	C6A	Performance Category: Category 6A
	C6e	Performance Category: Category 6e
	M	Performance Category: 10/100 Mbit
	G1	Performance Category: 10/100/1000 Mbit
	G10	Performance Category: 10 Gbit
	U	Performance Category: Unshielded
	MP	Performance Category: 10/100 Mbit with POE
	MP+	Performance Category: 10/100 Mbit with POE+

Type codes