# **IP20 RJ45 FIELD PLUG PRODUCT DESCRIPTION**

# **PRODUCT INFORMATION**

C6A/C7 RJ45 FIELD PRO PLUG 360\*; C6A/C7 RJ45 Field Pro Plug 360 Degree MOQ: 10 pieces; For use with part numbers: 9557610-110; 556610A

#### SPECIFICATIONS

E-DAT Industry<sup>™</sup> IP20 RJ45 field plug component # 1401405012-I allows you to use an Ethernet Class E / Cat.6 connection for 10 BaseT, 100 BaseTX, 1000 BaseT and 10000 BaseT (10G) networks and is backwards compatible for any RJ45 Ethernet cabling system. Unique design enables dramatically faster field termination of screened (ScTP and F/UTP) and fully shielded (S/FTP) four-pair 100 (balanced) copper cable. Field termination requires no special tools. Finger force press of two mating parts results in secure connection via 8-pole insulation

displacement connection (IDC) with integrated shield bonding at plug housing and separate strain relief. With the patented E-DAT Industry IP20 RJ45 field plug you can connect installation cables (26/1 - 22/1 AWG) and patch cords (26/7 - 22/7 AWG). Optional component # 1401400810-I field plug insert enables IP67 ingress protection with the SteadyTec<sup>TM</sup> application solution when an enhanced MICE environmental rating is required.

Wire color identification on both components per TIA T68A and TIA 568B is standard. Includes passive PC board for proprietary Digital Signal Processing (DSP) compensation (phase and other cable parameters). The E-DAT Industry IP20 RJ45 field plug meets or exceeds all TIA/EIA-568-B-2.10 draft augmented Cat. 6, EN 50173-1:2002 for Class E, and ISO/IEC 60603-7-5 for Cat. 6 component standard requirements at swept frequencies up to 625 MHz. Solid Zinc die-cast housing (Ni plated) provides optimal protection from Alien crosstalk via captive 360° shield connectivity spring and precision design of wire staging or lay area that enables minimal untwisting (0.5 inch or less) of cable pairs. This provides potential balance of shield/screen/foil for EMF/RFI protection and shield attenuation of the link, per ISO/IEC 11801:2002-09 and EN50173-1:2002, meeting requirements of EMI proof per EN 55022-B and EMI emissions per EN 50082-1. These unique design features are what enable fast data rates up to 10G BaseT and the related longer life-cycle expected from this futuristic product when used with a ready for 10G cabling system. BTR test data for both UTP and STP cabling systems are available.

# **MECHANICAL DATA ACCORDING TO IEC 60603-7-5**

- Effectiveness of connector coupling devices: 50 N
- Mechanical operations: 750 plug-in cycles
- Insertion and withdrawal forces: 30 N
- Contact interface dimensions and plug dimensions at the mating area according to: IEC 60603-7

#### **GENERAL GUIDELINES FOR FIELD CABLING SPECIFIERS**

- Cable OD 5.5-8.5 mm (0.2- 0.3") optionally to 10.5 mm (0.42")
- Wire diameter to 1.6 mm (0.063")
- Solid wire 26/1-22/1 AWG, 0.40-0.64 mm (0.016 0.025")
- Stranded wire 26/7-22/7 AWG, 0.48-0.76 mm (0.019 0.030")
- Shield connection (plug/cable) 360° contact, spring loaded

#### **ELECTRICAL DATA ACCORDING TO IEC 60603-7-5**

- Nominal current at: 50° C 1A
- Nominal Voltage: max. 50 V d.c.
- Voltage proof: 1000 V d.c. or at a.c. peak, contact to contact 1500 V d.c. or at a.c. peak, contact to screen
- Contact resistance: 20 m Ohm
- Input to output d.c. resistance: 200 m Ohm
- Insulation resistance: 500 M Ohm

#### DATA TRANSMISSION CATEGORY / CLASS

- RF Transmission parameter: Cat.6/Class E according to ISO/IEC 11801:9-2002 and EN50173-1:2002
- Transfer impedance / shield attenuation: Cat.6/Class E according to ISO/IEC 11801:9-2002 and EN50173-1:2002

## ENVIRONMENTAL CLASSIFICATION ACCORDING TO ISO/IEC 24702

- Mechanical
  - Bump (3 times): 25g (250 m/s2) Shock: 25g (250 m/s2) Vibration sinusoidal: 2-500 Hz 0.35 mm 5g according IEC 60512 Test No. 6d Tensile strength: Free connector to cable 50 N
- Ingress Protection Category
  Protection category IP20 (optional IP67)
- Climatic Category 40/070/21 according to IEC 60603-7-5 Ambient temperature: -40°C to 70°C Damp heat cyclic: 5% to 85% non-condensing
- Electromagnetic
  - Shielding effectiveness: 4kV Electrostatic discharge contact 8kV Electrostatic discharge – air

RF: ISO/IEC 24702 Voltage proof :500V EFT/B and 1000 V surge Residual magnetism: ISO/IEC 24702

## MATERIALS OF CONSTRUCTION

- Housing: GD-Zn (die-cast zinc)
- Molding parts: PA

#### **RELEVANT STANDARDS AND UL LISTING**

- Premise cabling: ISO/IEC 11801:2002, EN50173-1:2003, ISO/IEC 24702
- Connectors: IEC 60603-7-5
- Standard for Communications Accessories: UL 1863





