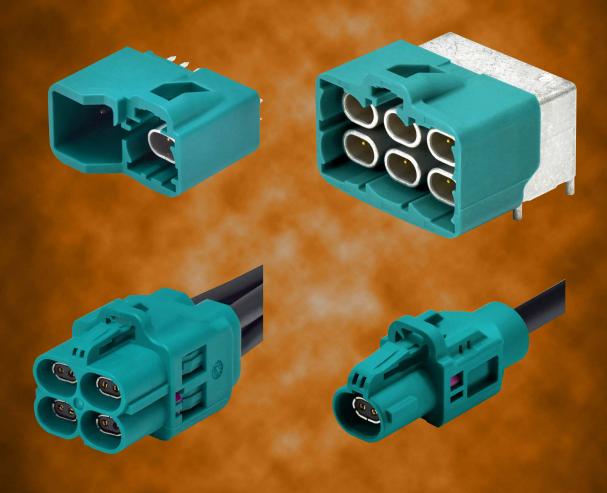
# ADAME ETECH



HIGH SPEED MODULAR TWISTED-PAIR DATA (HT-X SERIES)



## High Speed Modular Twisted-Pair Data HT-X Series

Adam Tech's High-Speed Modular Twisted-Pair Data (HT-X Series) products offer a fully shielded differential solution engineered for high-speed automotive Ethernet. This innovative interface, consisting of connectors and cable assemblies, delivers data transmission speeds up to 56 Gbps through a robust, automotive-grade connection. The high-performance modular design provides flexibility to support next-generation devices. Adam Tech's HT-X Series is available in a range of configurations, including port quantity, mounting style, color-coded housings, locking, and waterproof.

## **Features and Benefits:**

- Automotive grade ethernet solution compliant with LV214 / USCAR
- Compact, robust, and modular space saving package
- Data transmission speeds up to 56 Gbps
- Color-coded and keyed mechanical layouts to avoid misconnections
- · Single, double, quad, and six port housings
- Voltage rating up to 60 VDC
- Current rating up to 1.5A
- TPA (Terminal Position Assurance) available on cables
- Optional CPA (Connector Position Assurance) available on cables
- Waterproof versions (IP67/IP69K)
- MQS 6 pin version available for added power supply

## **Protocols:**

SERDES

- ASA Motion Link
- APIX<sup>®</sup>
- FDP-Link
- GMSL®
- GVIF
- HDBase-T™
- MIPI® A-PHY™
- PCIE®
- USB

- **Markets and Applications:**
- Autonomous driving
- · Camera system 4K
- · High-resolution display 4K
- Lidar
- Radar
- · Rear seat entertainment

## Automotive Ethernet

- 100BASE-T1
- 1000BASE-T1
- 2.5/5/10GBASE-T1



























## **CONNECTOR SPECIFICATIONS**

**Material:** 

Coding housing: PA

Inner housing: Thermoplastic Contacts: Copper Alloy

**Contact Plating:** 

Contact area: 6u" gold plated Solder tails area: 80-160u" tin plated

Underplate: 80-160u" nickel underplate overall

**Electrical:** 

Working voltage:  $\leq$  60V DC Power current:  $\leq$  1.5A VDC Contact resistance:  $10m\Omega$  max Insulation resistance:  $100M\Omega$  min Dielectric withstanding voltage: 250V rms Impedance, differential mode:  $100\Omega$ Frequency: DC up to 10 or 20 GHz

Mechanical:

Durability: 25 cycles

Engagement force: 75 or 90N max

Retention force: 110N min

Coding efficiency: 80N, 150N, or 225N min

**Environmental:** 

Thermal shock, mechanical shock, humidity & vibration

USCAR-2 & USCAR-17

DIN EN 60512 & DIN IEC 60068

Soldering: IEC 60068-2 Lead free, RoHS compliant

Temperature Rating:

Operating temperature: -40°C to +105°C

Packaging:

Tape & reel





## **CABLE SPECIFICATIONS**

Cable:

Differential cable: 26AWGx2C+AL+Braid, O.D. = .150" [3.8mm]

Jacket color: Black TPE

**Electrical:** 

Impedance:  $100\Omega$ 

Insulation resistance:  $100M\Omega$  min @500V DC

**Mechanical:** 

Insertion force: 45 or 75N max Unmating force: 5N min Durability: 25 cycles min Retention force latch: 110N min

**Environmental:** 

Thermal shock, mechanical shock, humidity & vibration

USCAR-2 & USCAR-17 DIN EN 60512 & DIN IEC 60068 Lead free, RoHS compliant

**Temperature Rating:** 

Operating temperature: -40°C to +105°C

Packaging:

Bag



















































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