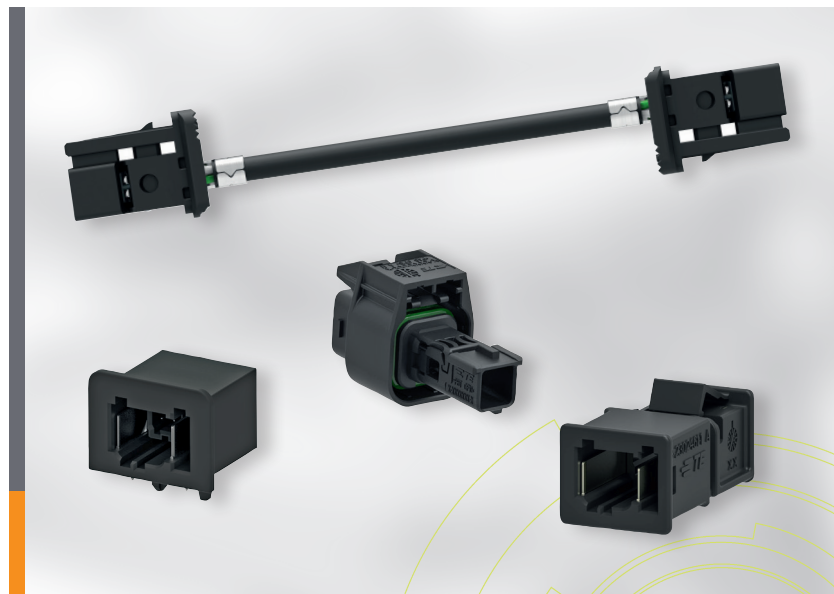


MATEnet Modular and Scalable Connectors

Enabling Automotive
Ethernet



MATenet

Modular and Scalable Connectors

Enabling Automotive Ethernet

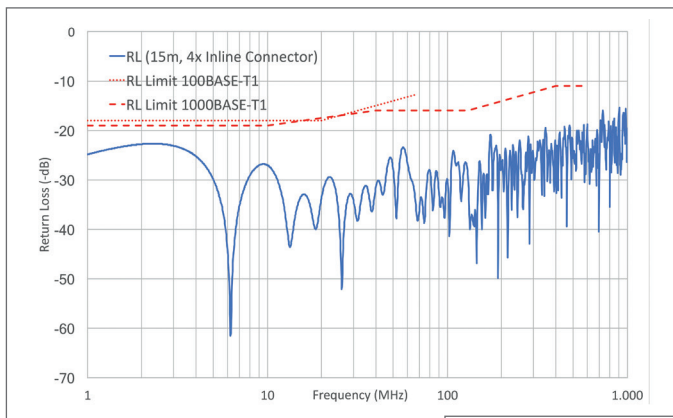
TE Connectivity's (TE's) MATenet modular and scalable connectors are designed for the harsh automotive environment and can transmit up to 1Gbps according to IEEE 100BASE-T1 and 1000BASE-T1 Standards.

TE Connectivity's MATenet interconnection system contributes to modern E/E architectures and answers today's

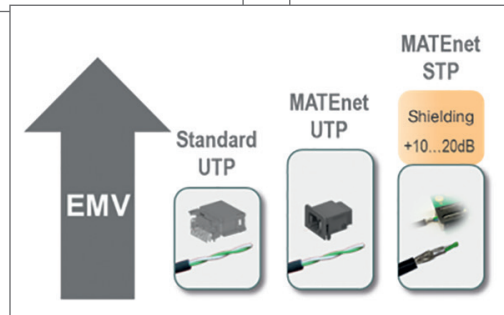
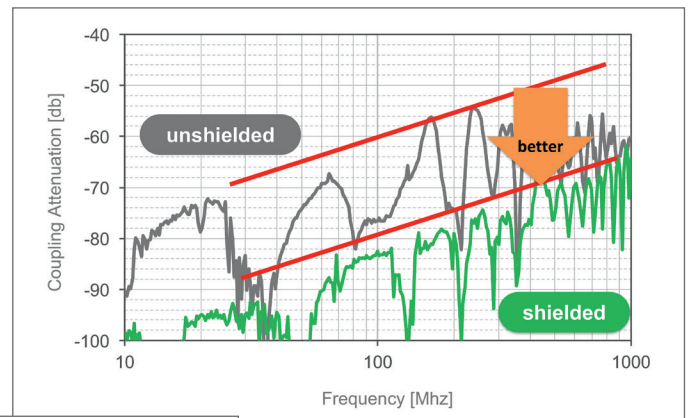
and tomorrow's requirements of vehicle connectivity. MATenet was specifically developed for IEEE Automotive Ethernet networks and set a standard for unshielded cabling.

It relies on automotive-grade, miniaturized, robust and proven interconnection technology and has successfully passed severe testing and validation.

Signal integrity return loss



EMC mode conversion / coupling attenuation



Benefit

Automotive grade robustness:

- NanoMQS terminals system

Higher data-rate:

- Applicable for up to 1Gbps (also potential for 6 Gbps with alternative technologies)

IEEE conformance:

- 100BASE-T1 (100Mbps - IEEE802.3bw) and 1000BASE-T1 (1Gbps - IEEE802.3bp)
- Potentially up to 6 Gbps with alternative technologies

More flexibility:




- Compatible with Unshielded Twisted Pair (UTP) and Shielded Twisted Pair (STP)
- Cost efficient - design and process perfectly aligned for Automotive Ethernet needs
- Provides a modular and scalable solution that fits to automotive connectivity building blocks








Applications

- In-Vehicle Networks
- Advanced Driver Assistance Systems (ADAS)
- Radar / LIDAR Applications
- 360° surround view camera
- On-board diagnostic (V2X technologies)

Market Compatibility

- PoDL (Class 3 - 48 Volt)
- A2B
- HDBaseT

Header Portfolio	Description	TE PN
	1 port Header	0-2304372-1/-2/-3*
	1 port Header sealed	0-1802162-1/-2/-3*
	1 port Header 180°	0-2308956-1/-2/-3*
	2 port Header	0-2305987-1/-2/-3*
	5 port Header	0-2305390-1/-2/-3*
	6 port Header 2 row	0-2339800-1/-2/-3*

Connector Portfolio	Description		TE PN
	1 port	UTP	0-2302454-1/-2/-3*
		STP	0-2302510-1/-2/-3*
	1 port sealed	UTP	0-1802105-1/-2/-3*
		STP	0-1802113-1/-2/-3*
	1 port Inliner Coupler (with male insert)		0-2302461-1/-2/-3*
	2 port	UTP	0-2305974-1/-2/-3*
		STP	0-2307961-1/-2/-3*
	5 port	UTP	0-2302455-1/-2/-3*
		STP	0-2302515-1/-2/-3*
	6 port	UTP	0-2302456-1/-2/-3*
		STP	0-2302516-1/-2/-3*
	6 port 2 row	UTP	0-2334013-1/-2/-3*
		STP	0-2333538-1/-2/-3*

Application Specification

Cable Assemblies and Components: 114-94431
Header: 114-94448

Product Specification

108-94568

* xxx-1 Code A / xxx-2 Code B / xxx-3 Code C - further codings on request

MATenet Cable Assembly (UTP/STP)



Possible Configurations:

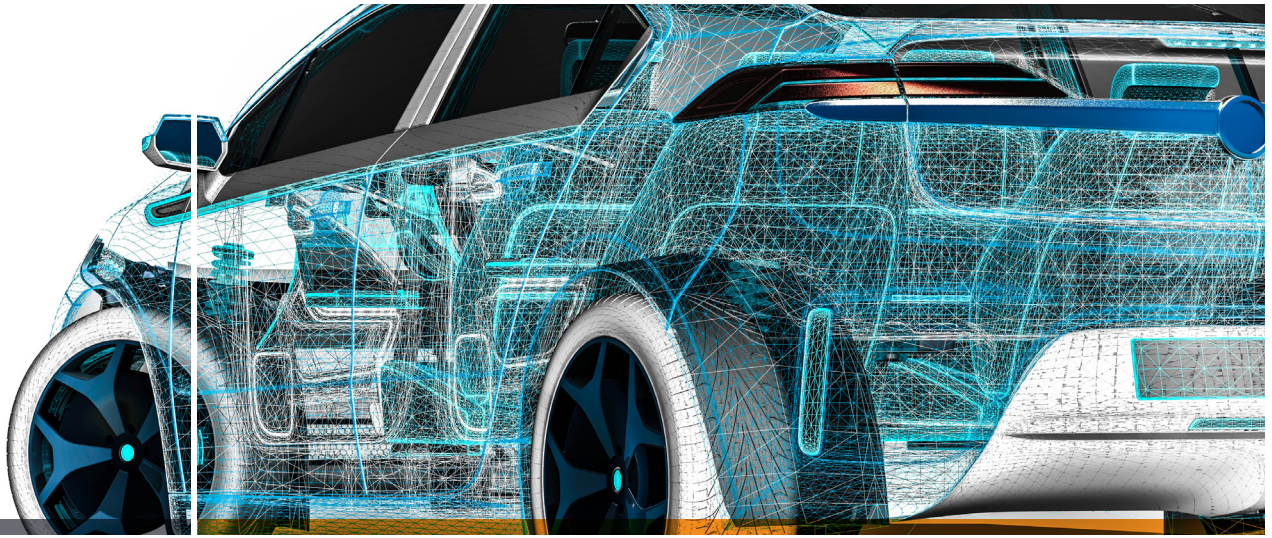
- 1 port Frame - 1 port Frame
- 1 port Frame - 1 port Inline Coupler
- Female insert - Female insert
- Female insert - Male insert

Available cable types: UTP 100 Mbps / UTP 1Gbps and STP 1Gbps

**For further information
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www.TE.com

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