Automotive Networking Connectivity Solution



Product Portfolio

As a leading supplier of high-speed networking solutions, Molex is supporting OEMs in the development of in-vehicle networks that are secure, prioritized, reliable and high bandwidth. Building upon its strength in cables, connectors, media modules and signal integrity innovations, Molex is addressing the increased demand for in-vehicle processing power.

HSAUTOLINK I

Speed	Protocol	Cable type	Description	Application
2 Gbps	Up to 100 Base, USB 2.0	UTP, STP	Rugged assembly with positive latching and assembly guide rails provides a proven interface offering durability Preassembled housing and industry standard header with multiple keying options, meets all USB 2.0 electrical and EMI shielding requirements and is USCAR-30 compliant USCAR-30 compliant ensures products are qualified and market tested to stand up to the rigorous in-vehicle environment Full-length cable shielding provides superior signal performance and reduced Electro-Magnetic Interference (EMI)	Connected vehicle services, Diagnostics/ Data upload, Infotainment, Navigation, Telematics, Camera, Display, Controller.

HSAUTOLINK II

Speed	Protocol	Cable type	Description	Application
13 Gbp	Up to 1000 Base, USB 2.0/USB 3.0, DisplayPort, FTP	UTP, STP, TwinAx	Manufactured from high-temperature plastic material that is compatible with lead-free through-hold reflow process (Pin-in-Paste) or lead-free selective wave soldering process Rear (soldering) side of right-angle headers features closed shield case providing robustness and guarantees signal integrity delivering high EMI protection Compact, low-profile optimizing device-side space savings to meet future needs for increasing high-speed communcation links uses proven Molex LFH (Low Force Helix) Flexible, expandable product family with data rates up to 13 Gbps allowing for combined links and supporting multiple protocols in the same connector (USB 2.0, USB 3.0, LVDS, Ethernet AVB, HDMI*, MicroCross DVI, DisplayPort¹, etc.) Compatible with shielded twisted-pair (STP) or jacketed unshielded twisted pair (JUTP) cable construction which is a cost-competitive solution for high-speed differential signaling applications providing construction flexibility Fully protected perimeter seals and wire seals esuring system is rated to IP67 and IP69K for use in harsh environments and	Camera sensor based, Camera, Controller, Diagnostics/Data upload, Infotainment, Navigation, Telematics, ADAS.

HSAUTOLINK II HYBRID

	Speed	Protocol	Cable type	Description	Application
N. C.	6 Gbps	Up to 1000 Base	UTP, STP, TwinAx	Ideal for mixed low speed, high speed and power applications, supporting infotainment systems, telematics and camera devices.	Camera sensor based, Camera, Controller,
					Diagnostics/Data upload, Infotainment, Navigation, Telematics, ADAS.

Automotive Networking Connectivity Solution Product Portfolio



High-Speed Fakra Mini

Speed	Protocol	Cable type	Description	Application
- 20 Gbps	Up to MultiGig Ethernet	Coax	The High-Speed FAKRA Mini (HFM) Coaxial Cable Solution delivers 20 Gbps of data speed for the connected vehicle, supporting any modern radar, camera, lidar or sensor applications.	Instrument cluster, ADAS, Modules, Camera, Antenna, GPS, Gateway/ Switch, 4K displays, Infotainment, Internet, Navigation, NextGen wireless LAN, Sensors, Surround view.

HSAutoGig

	Speed	Protocol	Cable type	Description	Application
	20 Gbps+	Up to MultiGig Ethernet STP, Tw	CTD TwinAv	HSAutoGig's small-form-factor headers reduce its demand for valuable PCB space for customers. HSAutoGig cables provide customers a scalable high-speed networking solution for multi-gig Ethernet applications.	Instrument cluster, ADAS, Modules, Camera, Antenna, GPS, Gateway/ Switch, 4K displays, Infotainment,
			STP, IWIIIAX	The HSAutoGig high-speed Ethernet solution delivers 20 Gb+ data speeds and a reliable interface to connect smart-sensor systems and Ethernet network platform in support of the drive toward greater vehicle autonomy.	Internet, Navigation, NextGen wireless LAN, Sensors, Surround view. Buses, Trucks, Taxi, Self driving.

USB ILLUMINATED

	Speed	Protocol	Cable type	Description	Application
	480 Mbps	USB 2.0	STP	Delivers USB 2.0 data requirements in an illuminated interface for easy mating in all lighting conditions. Custom colors are available and may be formulated to meet most requests. Max. and min. luminosity may also be customized	Infotainment, Navigation, Media modules
	480+ Mbps	USB 2.0/USB 3.0	STP, TwinAx		

Automotive Networking Connectivity Solution Product Portfolio



Markets

Automotive

Commercial vehicles

Farm equipment

Motorcycles

All-terrain vehicles

Watercraft

Aircraft

Applications

Infotainment

Telematic devices

Safety and collision avoidance cameras

In-Vehicle applications

Navigation systems

Connected vehicle services

Advanced Driver Assistance System (ADAS)

