

Industrial Ethernet

The focus of Industrial 4.0 is on intelligent machine-to-machine communication, robotics, and automation through faster and smarter networks. This is made possible with high-speed industrial Ethernet connectivity.



ix IndustrialTM
Magnetics Connector

ix IndustrialTM
IP20

ix IndustrialTM
IP67

Product Family

								
	SPE IP20	SPE IP67	<i>ix Industrial™</i> IP20	<i>ix Industrial™</i> Magnetics	<i>ix Industrial™</i> IP67	Industrial RJ Plug	RJ45 IP67	Modular Jacks
Pairs of Wire	1	1	4	4	4	4	4	4-5
No. of Positions	2	2	10	10	10	8	8	8-10
Bandwidth	600 MHz	600 MHz	500 MHz	500 MHz	500 MHz	500 MHz	100 MHz	100-500 MHz
Performance / Cable length	IEEE802.3bp 1000BASE-T1 up to 40m IEEE802.3bw 100BASE-T1 up to 15m IEEE802.3cg 10BASE-T1 up to 1km	IEEE802.3bp 1000BASE-T1 up to 40m IEEE802.3bw 100BASE-T1 up to 15m IEEE802.3cg 10BASE-T1 up to 1km	10GBASE-T up to 100m 5GBASE-T up to 100m 2.5GBASE-T up to 100m 1000BASE-T up to 100m 10/100 BASE-T up to 100m	10GBASE-T up to 100m 5GBASE-T up to 100m 2.5GBASE-T up to 100m 1000BASE-T up to 100m 10/100 BASE-T up to 100m	10GBASE-T up to 100m 5GBASE-T up to 100m 2.5GBASE-T up to 100m 1000BASE-T up to 100m 10/100 BASE-T up to 100m	10GBASE-T up to 100m	1000BASE-T up to 100m	Cat3/Cat5 Cat5e Cat6 Cat6A
Specified Voltage	60VDC	60VDC	50VAC, 60VDC	60VDC	50VAC, 60VDC	60VDC	125VAC	125VAC
Specified Current	4A	4A	1.5A	960mA	1.5A	1.5A	1.5A	1.5A
PoE capability	IEEE802.3bu (PoDL) 50W	IEEE802.3bu (PoDL) 50W	IEEE802.3af (PoE) 15.4W IEEE802.3at (PoE+) 30W IEEE 802.3bt (PoE++) 100W	IEEE802.3af (PoE) 15.4W IEEE802.3at (PoE+) 30W IEEE 802.3bt (PoE++) 100W	IEEE802.3af (PoE) 15.4W IEEE802.3at (PoE+) 30W IEEE 802.3bt (PoE++) 100W	IEEE802.3af (PoE) 15.4W	N/A	IEEE802.3af (PoE) 15.4W IEEE802.3at (PoE+) 30W IEEE 802.3bt (PoE++) 100W
RoHS compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standards	IEC 63171-6	IEC 63171-6	IEC61076-3-124	IEC61076-3-124	IEC61076-3-124	ANSI/TIA-568.2-D	IEC60603-7	IEC60603-7
Shielding	360 degrees (fully shielded)	360 degrees (fully shielded)	360 degrees (fully shielded)	360 degrees (fully shielded)	360 degrees (fully shielded)	Fully shielded	Unshielded	Shielded, Unshielded
Mating Cycles	1,000 minimum	100 minimum	5,000 minimum	5,000 minimum	100 minimum	750 minimum	100 minimum	750 minimum
Operating Temp Range	-40°C to +85°C	-40°C to +85°C	-55°C to +85°C	-40°C to +85°C	-55°C to +105°C	-45°C to +85°C	-40°C to +85°C	-55°C to +85°C
Ingress Protection Level	IP20	IP67	IP20	IP20	IP67	IP20	IP20	IP20
Latch Retention Force	50N minimum	100N minimum	80N minimum	80N minimum	100N minimum	36N minimum	100N minimum	90N minimum

Amphenol

COMMUNICATIONS SOLUTIONS

With the introduction of several new Ethernet standards, factory automation programs utilising Industrial Internet of Things (IIoT) connectivity now have expanded capabilities to communicate in the same language from sensors and input devices, all the way up to the cloud. Whether the requirement is for a single twisted pair up to 1km away (10BASE-T1L) , or a 10GBASE-T connection (Cat6A) carrying real time inspection data over a four pair connection, Amphenol has a full range of Industrial Ethernet connectors to reliably help carry the load.

We offer a range of interconnect and cable assembly products which support Power over Ethernet (PoE) or Power over Data Line (PoDL), so that remote devices can be powered through the same connection that carries the signals.



Learn more at
amphenol-cs.com/industrial-ethernet