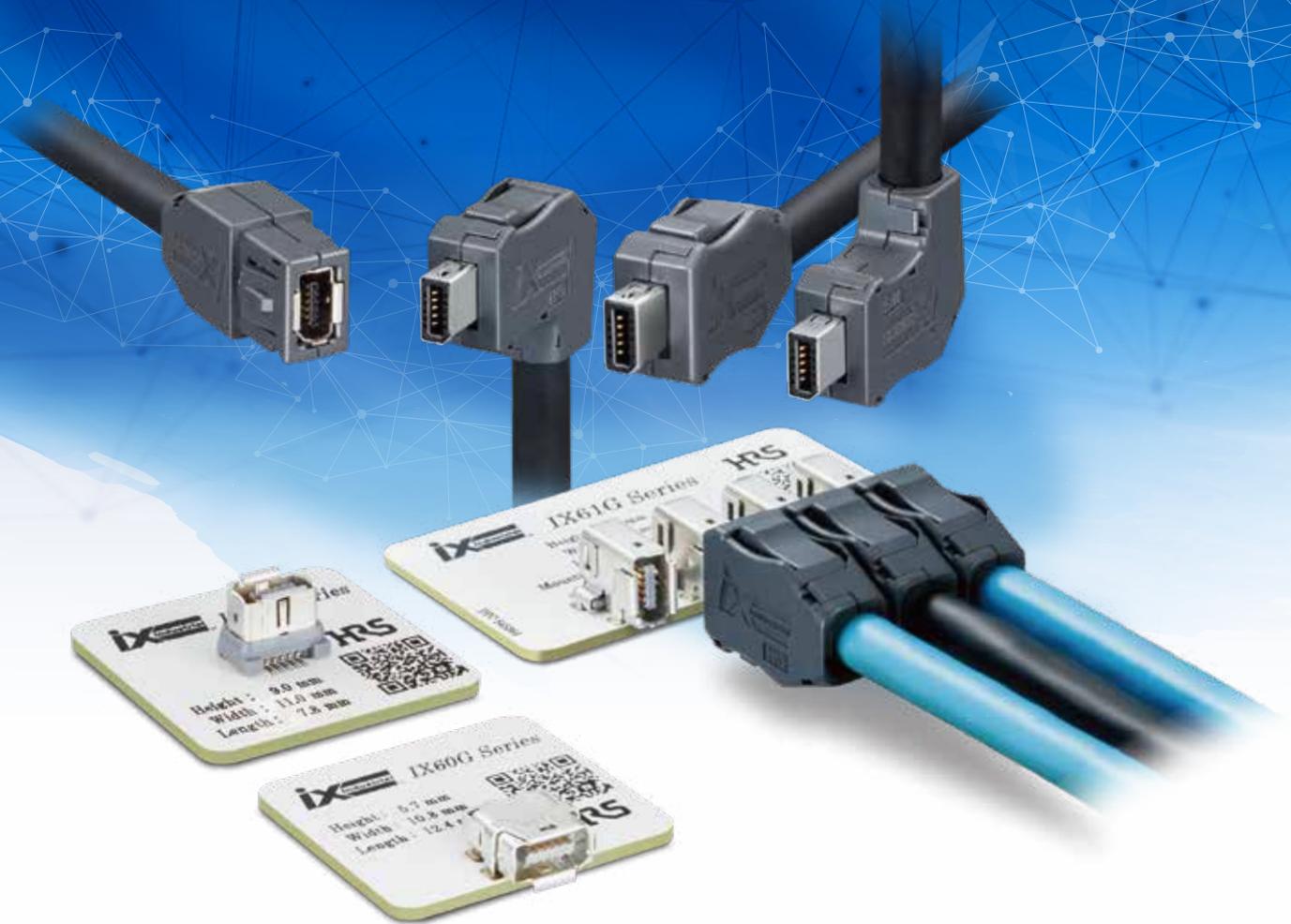HRS
HIROSE ELECTRIC CO., LTD.

ix Industrial™

IEC 61076-3-124   IEC Standard, The Next-Generation Industrial Transmission Connector

ix Industrial™

Compact   Robust   CAT 6A

Advance with **ix Industrial**™

Industrial Connector for the Future of Factories

The ix Industrial is the next-generation connector for Ethernet and other industrial equipment transmissions.

The small, robust design makes ix Industrial ideal for use in industrial environments. The high speed transmission design together with the IEC 61076-3-124 standard compliant interface contribute to equipment evolution and smart manufacturing applications.

Are you experiencing these obstacles?

Existing connectors are too big and don't allow for free use of the mounting space...

It takes such a long time to transmit a large amount of data...

The connector breaks so easily...

These Issues

ix Industrial™
can solve them!

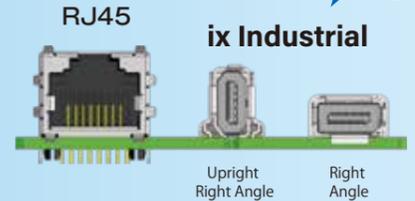---

3 Special Features

1 Compact

Compact

Smaller Size, Greater Design Freedom

Are you frustrated with the size of the connector you are currently using?

The ix Industrial offers a size reduction of 75% compared to RJ45. The right angle receptacle provides an even greater height reduction. Furthermore, the upright right angle and vertical receptacle types allow for 10mm pitch parallel mounting.

The ix Industrial enables greater board design flexibility and is ideal for space reduction.

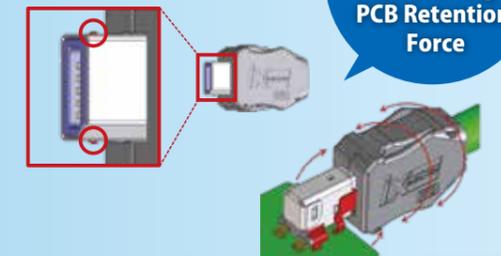**75% Volume Reduction**

RJ45   ix Industrial

Upright Right Angle   Right Angle

2 Robust

Robust

Breakage Prevention

With ix you won't have to replace the connector due to damage.

The metal lock latches won't break, and the shell is through-hole mounted.

The design reduces stress to the SMT leads while preventing breakage from prying.

The ix Industrial was designed with vibration and impact resistance in mind.

Reduces Prying Stress and Maintain High PCB Retention Force

3 High Speed

CAT 6A

Supports a Wide Range of Transmission Speeds

High speed, high capacity Cat.6A performance.

The ix Industrial makes stable high speed transmission of Cat.5e (1Gbps/4 Pairs) and Cat.6A (10Gbps/4 Pairs) a reality.

It is also used in a variety of applications, from Ethernet in FA equipment to medical devices. Many major manufacturers use the ix Industrial.
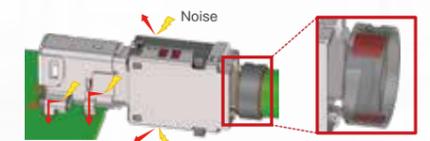
10G Cat.6A

Additional Feature

Superior Noise Resistance

The ix Industrial does not transmit or receive noise.

The shell is crimped together and comes into direct contact with the receptacle's ground spring for shielding.

The ix Industrial can be used safely in any operating environment.

Noise

ix Industrial™

Specifications

Connector Type	Plug		Right Angle Plug		In-line Jack	Receptacle		
	Solder	IDC	Solder Downward Cabling Upward Cabling	IDC Downward Cabling Upward Cabling	In-line	Upright Right Angle	Right Angle	Vertical
Network Type (Key)	A : Ethernet B : Non-Ethernet C (Under Development) : Ethernet		A : Ethernet B : Non-Ethernet			A : Ethernet B : Non-Ethernet C (Under Development) : Ethernet	A : Ethernet B : Non-Ethernet	
Product Image								
Rated Current	1.5A/pin (All pins), 3.0A/pin (Pin No.1, 2, 6, 7)							
Rated Voltage	50V AC/ 60V DC							
Withstanding Voltage	500V DC for 1 min. (IX61G2 Between Signal and Shield : 2250V DC for 1 min.)							
Mating Durability	5,000 times							
Operating Temperature	-40 to +85℃							
Cable Size	22 - 28 AWG	22 - 28 AWG*	22 - 28 AWG			-		

*For the 22 AWG compatible IDC plug, cable assembly is possible up to 8pos. Contacts No. 3 and 8 do not have a hole to pass the cable through the IDC guide.

Application Examples

Servo Amplifier
- Compact design allows high density mounting
- Noise protection

Camera
- Certified GigE Vision® * interface standard for machine vision

PLC
- Allows size reduction and high speed transmission

Robot Controller
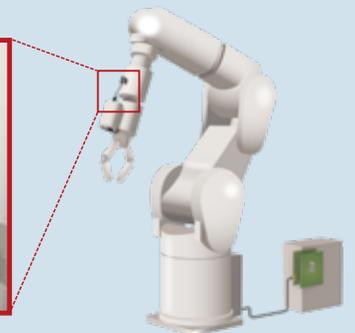- Robust design ideal for use at manufacturing sites

*GigE Vision® is a registered trademark of the A3 (Association for Advancing Automation).

RJ45 Plug Compatible with ix Industrial Cable Assemblies (TM61P Series)

The TM61P Series is an RJ45 modular plug supporting Cat.6A transmission.
With an applicable cable size (sheath diameter) of ø6.0-6.5mm that is compatible with the ix Industrial,
the TM61P Series is ideal for when you want to attach an RJ45 to the opposite side of an ix Industrial cable assembly.

ix Industrial
TM61P

Robot to Camera Connection Example

ix Industrial™ Special Site → hirose ix [Search]

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