



A Furukawa Company

Your Optical Fiber Solutions Partner®

LC

Industrial Networking Solutions
Easy to learn, quick to connect

Solar Farm Controls



New and improved! Industrial Cables, Crimp and Cleave LC Connectors, and Kits

With advances in photovoltaic (PV) and Solar Thermal energy conversion, harvesting solar energy is more economical than ever. Energy farms, both PV and Solar Thermal, rely on industrial control networks to efficiently and reliably track the sun to optimize conversion to electricity. Industrial Ethernet provides seamless data integration within the control systems of solar farms providing real-time visibility to operational data. Ethernet has dramatically improved the data collection and exchange landscape, but harsh physical conditions of installed cabling remain a challenge. These complex networks require robust, dielectric data links comprised

of ruggedized fiber optic connections and easy-to-use field connectorization.

Issues of reliability and installation simplicity abound:

- The need for simpler network moves, adds, and changes
- The need for rapid restoration of damaged cabling
- Exposure to UV
- Widely fluctuating temperatures
- Vibration

These are the real-world challenges faced by solar farm designers and installation crews. The GiHCS® solution from OFS answers the call with industrialized, high-bandwidth multimode fiber optic cabling solutions, strength enhanced glass, ruggedized GiHCS fiber optic cables, and Crimp & Cleave LC connector technology, making plug-in interoperability with common SFP transceivers and reliable transmission of Ethernet data easier than ever.









GiHCS, LSZH/OFNR Riser Rated Industrial Cables:

- For Fast (100Mb/sec) and Gigabit Ethernet (1000 Mb/sec)
- Operating temperature: -20 to +80 °C
- For use indoors or outdoors
- High tensile strength
- Abrasion, vibration, and chemically resistant
- Aramid Free, 2.2 mm Zipcord and Breakout Cables
- PVC-free design
- RoHS and REACH compliant

Crimp and Cleave LC Connectors and Kits:

- Compatible with SFP transceivers
- No power, no epoxy, no gels, no polishing
- Easy to learn, quick to connect
- Optical fiber specialists not required

GiHCS® Optical Fiber Cables

GiHCS Graded-Index Hard Coat Silica*	Cable Construction	Part Number	Use	Outer Cable Diameter	Outer Jacket Color	Outer Jacket Material	Cable Weight	Min. Bend Radius Under Load	Min. Bend Radius Unloaded	Max. Installation Tensile Load	Max. Operating Tensile Load	Attenuation	Operating Temperature
GiHCS 50/200/230/500 µm	Zipcord 	C26136	Indoor	2.2 ± 0.1 x 4.6 mm	Orange	LSZH	<12.0 kg/km	33 mm	22 mm	25 lbs (111 N)	5 lbs (22 N)	≤5 dB/km @850 nm ≤3 dB/km @1300 nm	-20 to +80 °C
	2-Fiber Waterblocked 	C26138	Indoor/ Outdoor	8.0 ± 0.4 mm	Black	LSZH	<70 kg/km	120 mm	80 mm	530 lbs (2358 N)	265 lbs (1179 N)		-20 to +80 °C
	4-Fiber Waterblocked 	C26140	Indoor/ Outdoor	8.0 ± 0.4 mm	Black	LSZH	<70 kg/km	120 mm	80 mm	530 lbs (2358 N)	265 lbs (1179 N)		-20 to +80 °C
GiHCS 62.5/200/230/500 µm	Zipcord 	C26135	Indoor	2.2 ± 0.1 x 4.6 mm	Orange	LSZH	<12.0 kg/km	33 mm	22 mm	25 lbs (111 N)	5 lbs (22 N)	≤5 dB/km @850 nm ≤3 dB/km @1300 nm	-20 to +80 °C
	2-Fiber Waterblocked 	C26137	Indoor/ Outdoor	8.0 ± 0.4 mm	Black	LSZH	<70 kg/km	120 mm	80 mm	530 lbs (2358 N)	265 lbs (1179 N)		-20 to +80 °C
	4-Fiber Waterblocked 	C26139	Indoor/ Outdoor	8.0 ± 0.4 mm	Black	LSZH	<70 kg/km	120 mm	80 mm	530 lbs (2358 N)	265 lbs (1179 N)		-20 to +80 °C

Fire Safety

Qualified to the following US, Canadian and International Standards. OFNR/FT-4 Riser, US and Canadian UL 1666, Flammability IEC 60332-3 (for zipcord, 2-Fiber & 4-Fiber cables), Smoke Density IEC 61034, Halogen Gas Emissions IEC 60745-1, Acid Gas Emissions IEC 60745-2

Crimp and Cleave LC Connectors

for GiHCS® Optical Fiber Cables

Connector Type	Part Number	Cable Type	Termination Kit Part #	Insertion Loss Kit Part #
Simplex	P26763-01 (Beige Boot) P26763-02 (Black Boot)	Aramid Free, 2.2 mm Zipcord and Breakout Cables	DT03732-LC1	P10188-15
Duplex	P26764-01 (2 Beige Boots) P26764-02 (2 Black Boots) P26764-03 (One Beige, One Black Boot)			

LC Connector Insertion Loss (dB)

	850 nm		1300 nm	
	Typical	Maximum	Typical	Maximum
50/200/230 GiHCS	1.0	1.5	1.2	1.7
62.5/200/230 GiHCS	1.0	1.5	1.2	1.7

GiHCS® Optical Fibers

Fiber*	Dimensions	Numerical Aperture	Bandwidth		Attenuation	
GiHCS 50 µm	50/200/230/500 µm	0.20 ± 0.02	>400 MHz-km @850 nm	>400 MHz-km @1300 nm	≤2.8 dB/km @850 nm	≤1.0 dB/km @1300 nm
GiHCS 62.5 µm	62.5/200/230/500 µm	0.275 ± 0.020	>200 MHz-km @850 nm	>500 MHz-km @1300 nm	≤3.5 dB/km @850 nm	≤1.2 dB/km @1300 nm