



A Furukawa Company

Your Optical Fiber Solutions Partner®

SC

Industrial Networking Solutions
Easy to learn, quick to connect

Solar



Harnessing the Sun's Energy, the Industrial Way

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

Seeking clean and environmentally friendly ways to produce electricity, many are considering solar energy. With advances in photovoltaic (PV) and thermal energy harvesting, clean and inexhaustible solar energy is now more efficient and economical than ever before. The advantages of solar are well-known: improved energy security through distributed generation, an energy source that is natural and reliable, import-independent and sustainable, a reduced carbon footprint and a good counter-balance to help keep prices of traditional fuels in check.

Solar farms, both PV and Solar Thermal, rely on industrialized networks to efficiently and reliably track the sun, thus optimizing conver-

sion of solar energy to electricity. In today's most advanced solar farms, these complex networks require robust, dielectric data links comprised of ruggedized fiber optic connections and easy-to-use field connectorization.

Taking advantage of OFS' GiHCS® (graded-index HCS®) industrial cabling solution, with new crimp & cleave SC and SC-RJ connector products, greatly simplifies the installation and repair of these networks, especially when running Fast or Gigabit Ethernet. For installations with space limitations we also offer the SC-RJ, a small form factor version of SC that consumes no more footprint than a traditional RJ-45 twisted-pair connector.

The GiHCS system provides distinct advantages for installation in the harsh conditions found in remote solar farm sites:

- Wide operating temperature for exposed installations
- All dielectric, lightning resistant cables
- Robust designs, suitable for humid environments
- Rugged, simple-to-learn, simple-to-use SC and SC-RJ connectors compatible with commonly available GBIC transceivers: field termination and insertion loss kits
- Hand-held tools, no gluing, curing or polishing









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
- 2.5 mm Zipcord and Breakout Cables
- PVC-free design
- RoHS and REACH compliant

Crimp and Cleave SC Connectors and Kits:

- Compatible with GBIC 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 	C26642	Indoor	2.5 x 5.2 mm	Orange	LSZH	<11.0 kg/km	38 mm	25 mm	165 lbs (734 N)	85 lbs (378 N)	≤3.5 dB/km @850 nm ≤1.5 dB/km @1300 nm	-20 to +80 °C
	2-Fiber Waterblocked 	C26644	Indoor/ Outdoor	8.0 mm	Black	LSZH	<45.0 kg/km	120 mm	80 mm	310 lbs (1379 N)	155 lbs (689 N)		-20 to +80 °C
	4-Fiber Waterblocked 	C26646	Indoor/ Outdoor	8.0 mm	Black	LSZH	<45.0 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 	C26643	Indoor	2.5 x 5.2 mm	Orange	LSZH	<11.0 kg/km	38 mm	25 mm	165 lbs (734 N)	85 lbs (378 N)	≤4.0 dB/km @850 nm ≤2.0 dB/km @1300 nm	-20 to +80 °C
	2-Fiber Waterblocked 	C26645	Indoor/ Outdoor	8.0 mm	Black	LSZH	<45.0 kg/km	120 mm	80 mm	310 lbs (1379 N)	155 lbs (689 N)		-20 to +80 °C
	4-Fiber Waterblocked 	C26647	Indoor/ Outdoor	8.0 mm	Black	LSZH	<45.0 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 SC Connectors

for GiHCS® Optical Fiber Cables

Connector Type	Part Number	Cable Type	Termination Kit Part #	Insertion Loss Kit Part #
Simplex	P25561-BKS (Black) P25561-BGS (Beige)	2.5 mm Zipcord and Breakout Cables	DT03732-SC1	P10188-14
Duplex	P25561-BKD (Black) P25561-BGD (Beige)			
SC-RJ	P25561-BKRJ (Black) P25561-BGRJ (Beige)			

SC 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	0.7	1.2	0.9	1.4
200/230 HCS®	0.7	1.0	-	-

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