

Ideal for: Long-Haul Backbone Fiber Applications | Connecting Distributed Inverter Blocks | Designing SCADA and Control Networks

Renewable energy facilities demand fiber solutions built for distance, durability, and extreme environmental conditions. OCC delivers engineered connectivity for solar arrays, wind farms, BESS systems, and utility-scale substations, supporting reliable performance from the field to the control room.

Cabling Solution:

For SCADA Networks, Security & Instrumentation, & Control Applications

DX-Series:

Indoor/Outdoor Tight-Buffered
(Direct-Burial & Duct Environments)

- Riser, Plenum, & LSZH options meet indoor fire-safety requirements
- Tight-buffered subunits simplify routing and handling
- Ideal for control rooms, SCADA networks, and protected equipment areas



B-Series:

Breakout Cable
(Instrumentation & Control)

- Durable construction for cabinets and panel routing, available in Riser, Plenum, & LSZH
- Rugged subunits for fast, simple terminations
- Excellent for turbine towers and inverter skids



TL-Series Loose Tube

Backbone Fiber
(Harsh Outdoor & Direct-Burial Environments)

- All-dielectric, gel-free loose tube construction
- Bend-insensitive fiber (G.657.A1 / G.652.D compliant)
- Water-swallowable blocking for moisture resistance
- Broad temperature range: -40°C to +70°C
- High tensile strength for long conduit pulls

OCC's TL-Series Loose Tube OSP cables are engineered for long-distance backbone routes across renewable energy sites, industrial corridors, and substations. Available in armored and unarmored constructions, TL-Series delivers reliable performance in conduit and direct-burial applications.

Fiber in Conduit (FIC)

OCC's DX-Series and TL-Series fiber can be factory-installed smoothwall HDPE conduit to create a single, ready-to-deploy Fiber in Conduit (FIC) solution, ideal for direct burial and HDD installations.

- Tight-Buffered or Loose Tube options available
- Smooth wall HDPE conduit in 1.00" and 1.25" SDR sizes
- Enhanced resistance to moisture, chemicals, and rodent damage including mechanical and splice-on connectors
- Single part number simplifies ordering and logistics
- Supports long continuous lengths (up to 10,000 ft per reel)



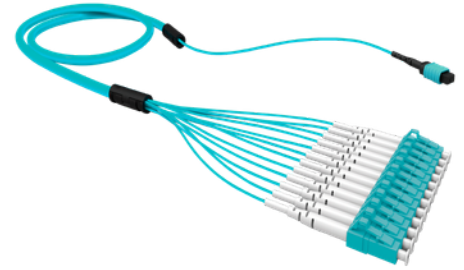
Fiber in Conduit (FIC)

Pre-Terminated Fiber Assemblies

Factory-Built. Field-Ready.

OCC pre-terminated assemblies reduce labor costs and accelerate installation timelines, critical for renewable EPC schedules

- Available for TL-Series OSP and tight-buffered transition cables
- Factory-built and tested for optical reliability
- Optional pulling eyes for long conduit runs
- Ideal for rapid installation across BESS and Sub-Station deployments



MPO-to-LC Assembly OM4 Aqua

A proven way to reduce downtime, improve consistency, and shorten commissioning timelines.

Connectivity & Enclosure Solutions

Built for Harsh Outdoor Conditions & Long-Term Field Performance.

OCC's connectivity portfolio ensures reliable termination and protection from generation site to control room:

- NEMA-rated outdoor enclosures for inverter pads, turbine bases, and substations
- DIN-rail industrial fiber boxes for cabinet and skid installations
- Adapter plates, splice on and mechanical splice connectors
- Rugged connectivity engineered for dust, moisture, temperature extremes, and vibration



NEMA 3 Wall Mount Enclosure



DIN-Rail Enclosure

WHY OCC FOR RENEWABLE ENERGY?

Reliability, Performance & U.S. Manufacturing

- Trusted in industrial and harsh- environment applications
- Engineering support for EPCs and utility planners
- End-to-end connectivity solutions from outdoor backbone to control room, including mechanical and splice-on connectors
- Proven performance in high-temperature, high-stress, moisture-rich environments



Battery Energy Storage System (BESS) & Solar Array