

**SECTION 8**

**OPUS**



**OPUS Series**



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## Introduction



### OPUS: OUTDOOR PUSH-PULL UNIVERSAL SOLUTION Compact, Dense & Modular

Radiall has initiated a new concept to answer to the most severe requirements of the customers concerning sustainability and impact on the environment:

- reduction of the size of the equipment
- increased level of corrosion resistance: pollutant gases, corrosive atmospheres

Compact, flexible and modular, OPUS is well adapted to this need for deployment of 4G LTE in Telecom Wireless, or any other industrial situation.

## APPLICATIONS

- Telecom: Fiber To The Antenna
- Industrial Connections
- Broadcasting



## INTERNATIONAL STANDARD DOCUMENTS COMPLIANCE

- IEC 61300 Fiber optic interconnecting devices and passive components
- IEC 60068 Environmental testing
- Telcordia GR-950 Optical Network Unit (ONU) Closures and Systems
- Telcordia GR-3108-CORE Class 4 Network Equipment in the Outside Plant (OSP)
- IEC 60529 Degrees of protection provided by enclosures (IP code)
- RoHS compliant



## FEATURES AND BENEFITS

### Easy to Install

- Push-Pull connection: same quick lock interface as OSIS®
- More compact
- High density

### High Resistance and Sustainability

- All engineered plastic for better corrosion resistance: adapted to Salt Spray combined with pollutant gases (SO<sub>2</sub>)
- Waterproof and dustproof: IP67 level
- LC connectors always protected

### Flexible and Modular

- Field installable without tools over existing patchcords
- Total modularity of the receptacle and the plug: compatible with any type of signal (optical, ethernet RJ45, or even coaxial)



Push-Pull connection

## Characteristics

OPUS solution has been designed to fulfill the qualification requirements of IEC 61300 standard (for fiber optic interconnection devices) and Telcordia GR-950 for American markets.

### MECHANICAL CHARACTERISTICS

Cable retention	100 N minimum
Mating endurance	100 mating cycles minimum

### ENVIRONMENTAL CHARACTERISTICS

Ingress protection class	IP67
Operating temperature	-40°C/+85°C
Storage temperature	-40°C/+85°C
Salt spray	IEC 61300-2-26 passed, 720H of exposure with addition of SO <sub>2</sub> gas
Vibrations	IEC 61300-2-1 passed

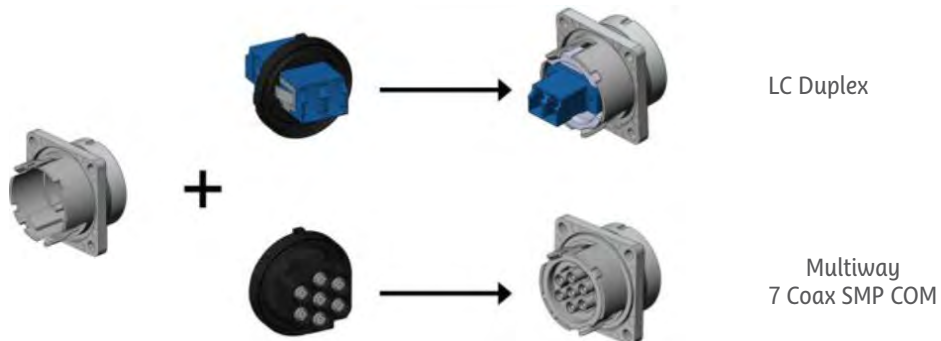
### CONCEPT OF TOTAL MODULARITY

Only one component needs to be changed from one type of signal to another, while the connector shell remains the same.

OPUS generic Short Plug Kit:



OPUS generic receptacle with adapter:



**Product Range**

**OPUS SHORT PLUG KIT**



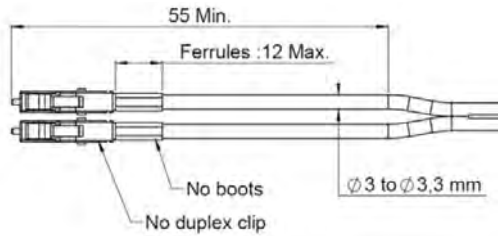
Part Number	Note	Packaging
OPUS 117 200	Plug connector only; no patchcord	Unitary in plastic bag with assembly note

The OPUS Short Plug Kit has been designed to fit with fiber optic cables with a 3 mm diameter and for connection to a receptacle with adapter.

The Kit can be mounted in the field on simplex or duplex cables, with a 3 mm diameter, and ensures a IP67 protection due to the two specific sealing gaskets.

To guarantee proper operation when the OPUS Short Plug Kit is assembled over existing optical patchcords, the following preparation is recommended:

**LC Patchcord Termination Recommendations**



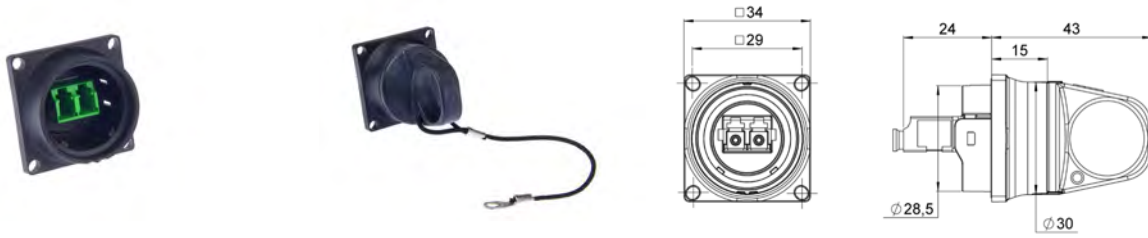
Short OPUS simplex cable connected on receptacle



Short OPUS duplex cable connected on receptacle

**Product Range**

**OPUS RECEPTACLE WITH LC DUPLEX ADAPTER**

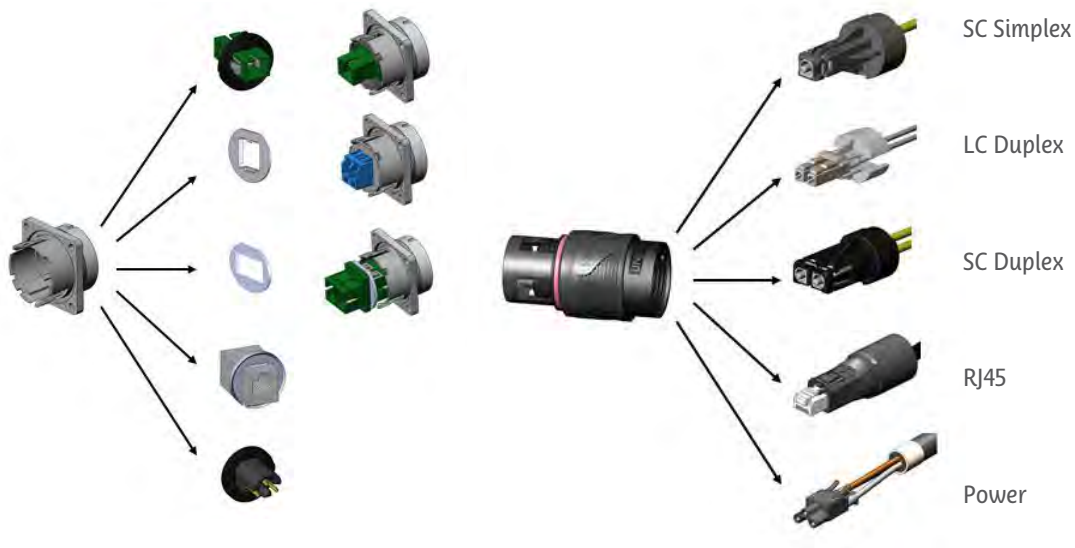


Part Number	Description	Packaging
OPUS 107 200	OPUS receptacle with LC duplex adapter, SingleMode APC*, plastic cap with cord – IP67	60 pieces

\*Other versions for MultiMode or SingleMode available upon request. Please contact us.

**OPUS RANGE EXTENSION**

Development of the following versions:



For any additional information, please contact your local Radiall representative.

## Product Range

### OPUS PRE-MOUNTED OPTICAL CABLE ASSEMBLIES

Any configuration of pre-mounted optical cable assembly with OPUS Short Plug Kit on simplex or duplex cable diameter 3 mm can be available on demand.

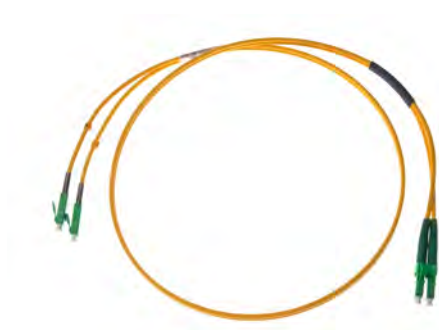


A plastic corrugated protective sleeve can fit at the rear extremity of the OPUS Short Plug Kit due to a standard adapted thread, thus ensuring complete IP67 protection over the entire length of the cable.



### LC PATCHCORDS

Radiall can also provide any configuration of LC optical patchcords for use with the OPUS Short Plug Kit.



Please refer to Section 9, Cable Assemblies & Optical Systems, for more information.