

# OCTIS™ Outdoor I/O System

Right angle board connector, cable connector kit and cable assembly

### **ROBUST I/O FOR HIGH** RELIABILITY AND PERFORMANCE

The versatile OCTIS™ I/O system, using multiple industry standard interfaces, features high speed signal and power, lightning protection, EMI shielding, and ease of installation for outdoor, compact and harsh environments.

- Transceiver moves outside the box, saving board space and providing better thermal management
- Lightning protection, EMI shielding features, and a rugged weather proof design makes it ideal for use in harsh environment applications
- Blind mate, float mount, color and physical coding features makes it easy to use and avoids incorrect mating
- Plug assembly options: Field installable or factory certified cable assembly
- Use of standard small form factor interfaces enable greater port to port density. This makes it ideal for outdoor applications like small cells, macro cells, smart radios and RRU/RRH.











#### **FEATURES**

- Outdoor weather proof
- Rugged design
- Multi standard and varying interconnection interface
- Adaptable interface holder and outer housing
- Color coding on gland nuts
- System addresses present and future signal and power requirements with option for additional connector interfaces
- 26mm pitch and <100m length from panel</li>
- Double locking feature

#### **BENEFITS**

- Suitable for most demanding environments. Lightning protection up to 15K Amps
- 100 mating cycles, 200N tensile load; suitable for sophisticated equipment used in modern telecom and industrial markets
- Suitable for various applications with standard connector interfaces like SFP/SFP+, Signal, PoE (Power over Ethernet), Power, Hybrid of Signal & Power and RJ45.
- Cable mounting, mating and locking remain the same regardless of interface used
- Visual identification of cable assembly type
- Upgrade option to higher data rate up to 10G & 25G per lane bandwidth and 35A+ per contact
- High density and small form factor
- Tamper proof

OCTIS™ is a trademark of Radiall. OCTIS™ is a joint product development between FCI and Radiall.

# **TECHNICAL INFORMATION**

Connector Interface		SFP/SFP+	RJ45	Signal/PoE Metral® HDXS	Power – Pwr Profile®	Hybrid - Signal & Power
Dimensions			94 x 26 x	27mm (Length x Width	x Height)	
Connector Interface Feature		Interoperable with all types of SFP/SFP+ ports and suitable for high data rate applications over long lengths	Commonly available interface	Meets requirements of PoE++, CAT 5e and ANSI for resistivity to over voltages up to 2500V. Current rating at 1.5A per pin and available in 8 position (4 pair) and 12 positions	High power application with current rating at 16A to 20A/power contact and available with 2,3 & 4 positions	Signal and power application
Key Electrical Performance		<ul><li>Power Supply Voltage: 3.3V</li><li>Power Consumption: 0.25W (typ.)</li></ul>	Current Rating: 1A	Current rating 1.5A/ pin	Current Rating: 16A to 20A/power contact	Current rating 1.5A/ pin or Cat5e
Key Environmental Performance IP67, 720 hours salt spray resistance; Operating Temperature Range : -55°C to +85°C						
Mating Force		-	22N max.	0.75N max./contact	29N max./contact	0.75N max./signal contact     29N max./power contact
Unmating Force		-	9.8N	0.15N min./contact	4N min./contact	<ul><li>0.15N min. for signal</li><li>4N min. for power</li></ul>
Target Markets	& Applications		tion System • Distribute		RU/RRH • Broadband • Co i) • Smart Grid Network ce	
Board Connector	P/N	SFP board (Edge) connector: 10122424-101LF Cage for connectors: • 10133694-101LF (PIP) • 10133694-102LF (Pressfit)	RJESE-8480-31 (Tab up) RJLSE-1NS-00001 (Tab down)	10133085-101LF	• 2 pos: 10133084–101LF • 3 pos: 10137559–102LF • 4 pos: 10137559–101LF	10131868-101LF
	Description	Suitable for all SFP/ SFP+ connectors	RJ45 socket has mating compatibility with standard RJ45 cable assemblies	Metral® HDXS board connector with 4 pair or 8 signal contacts	Power board connector with 2,3 & 4 contacts	Hybrid connector with 8 signal and 2 power contacts
Plug Kit	P/N (26mm pitch)	10135746-101LF	<ul> <li>10135742-101LF for tab up version</li> <li>10143848-102LF for tab down version</li> <li>10143848-101LF for tab down reverse lever</li> </ul>	10135750-101LF	• 2 pos: 10135752-101LF • 3 Pos: 10139481-102LF • 4 Pos: 10139481-101LF	10135748-101LF
	Description	OCTIS™ plug kit without SFP connector	OCTIS™ plug kit without RJ45 connector	OCTIS™ plug kit with 4 pair or 8 position signal connector	OCTIS™ plug kit with 2, 3 or 4 position power contacts connector	OCTIS™ plug kit with hybrid of 8 position signal and 2 position power
Finished Cable Assembly	P/N (Standard/ custom lengths, Double/open ended type)	10137109	10137111	10137115	10137117	10137118

## **HYBRID - SIGNAL & POWER CABLE CONNECTOR KIT**

