

## FTTx DATA SHEET

# Broad Spectrum FTTx OSP Optical Taps



The Champion ONE FTTx optical tap system is designed to accommodate easy installation access to GPON/EPON/RFoG optical distribution networks (ODN). The robust cassette design can accommodate a wide variety of splice enclosures. The taps are broad spectrum single mode fiber devices that pass all the standard wavelengths of current and future Passive Optical Network (PON) technologies.

The tap module is spliced in-line with the OSP fiber, taps off some of the power from the distribution fiber, and divides it to the fiber drop that feeds the individual service locations. The tap ports can be connectorized or provided as unconnectorized to facilitate fusion splicing.

## Technical Specifications

General Specifications	
Parameter	Value
Fiber Type	900µm, no connectors
Operating Temperature	-40° to 85° C
Humidity	5% to 95%
Telcordia Standards	GR-1221-CORE GR-1209-CORE

Cassette-style enclosure allows for mounting in customer-provided splice trays (metal and plastic options).

Optical Performance	
Parameter	Value
Operating Wavelength	1250 – 1620nm
Port-to-Port Isolation	> 55 dB
Tap-to-Through-Leg Isolation	> 55 dB
Return Loss	> 55 dB

**2-Port**

C1 Part Number	Value	Typical Insertion Loss (dB)	Max Insertion Loss (dB)	Typical Tap Loss (dB)	Max Tap Loss (dB)
PLCS-2P-17-1M	17	0.5	0.6	15.0	17.1
PLCS-2P-15-1M	15	0.7	0.8	14.0	15.4
PLCS-2P-14-1M	14	1.0	1.2	12.3	13.4
PLCS-2P-12-1M	12	1.2	1.3	11.7	12.1
PLCS-2P-10-1M	10	1.9	2.1	9.3	10.2
PLCS-2P-8-1M	8	2.5	2.8	8.2	8.8
PLCS-2P-7-1M	7	3.9	4.4	6.4	7.3
PLCS-2P-5-1M	5	5.7	6.3	5.4	6.0
PLCS-2P-4T-1M	4T	TERMINATED	TERMINATED	3.6	3.8

**4-Port**

C1 Part Number	Value	Typical Insertion Loss (dB)	Max Insertion Loss (dB)	Typical Tap Loss (dB)	Max Tap Loss (dB)
PLCS-4P-17-1M	17	1.0	1.2	15.8	17.1
PLCS-4P-15-1M	15	1.2	1.3	14.6	15.8
PLCS-4P-13-1M	13	1.9	2.1	12.9	13.9
PLCS-4P-11-1M	11	2.5	2.8	11.9	12.5
PLCS-4P-10-1M	10	3.9	4.4	10.1	11.0
PLCS-4P-9-1M	9	5.7	6.3	9.0	9.7
PLCS-4P-7T-1M	7	TERMINATED	TERMINATED	7.1	7.5

**8-Port**

C1 Part Number	Value	Typical Insertion Loss (dB)	Max Insertion Loss (dB)	Typical Tap Loss (dB)	Max Tap Loss (dB)
PLCS-8P-17-1M	17	1.9	2.1	16.0	17.3
PLCS-8P-15-1M	15	2.5	2.8	14.5	15.9
PLCS-8P-14-1M	14	3.5	4.4	13.7	14.4
PLCS-8P-12-1M	12	5.7	6.3	11.8	13.1
PLCS-8P-11T-1M	11T	TERMINATED	TERMINATED	10.2	11.0

Custom enclosure options are also available. Please contact your Champion ONE sales representative for more information.