

# RF over Glass (RFoG)

## RFoG and RFPON ONU (R-ONU) Powering Solutions

### FEATURES

- Designed for ARRIS RFoG and RFPON R-ONU solutions
- PS1000 high isolation 1.2 GHz power inserter
- AC/DC wall adapters
  - PS1921W-10 SMPS with universal AC input voltage and connectors for NEMA-USA, EU, and UK applications. Meets international and United States DOE Class VI efficiency specification
  - PS1911W (120 VAC NEMA/US 1-15P)\*
  - All models above feature type “F” female DC output connectors
- Uninterruptible Power Supply
  - Up to 20 hours of standard operation
  - 120 or 230 VAC input
  - Type “F” female DC output connector
- High reliability for long-term service



PS1921W-10



PS1911



PS1000



PS1811-UPS

### PRODUCT OVERVIEW

Most ARRIS RFoG Optical Network Unit (R-ONU) CPEs require external power for operation. Separately sold powering solutions include compact low-cost high reliability wall-mounted AC-to-DC adapters with 12 V<sub>DC</sub> or 15V<sub>DC</sub> outputs and standard female "F" type connectors having nominal AC input voltages of 120 or 100 to 240 Volts AC. Input mains connectors fit NEMA-USA, EU, and UK style connectors common to various worldwide geographical regions. NEMA-USA mains plugs offer a wall plate mounting lug that ensures a secure installation. The required power supply depends on the R-ONU CPE device being powered.

\* May not meet local efficiency regulations, thus limiting use in certain countries.



A battery back-up Uninterruptible Power Supply (UPS) supporting 100 to 240 VAC input range is also available, for continuous operation during AC power failures. The PS1801B-00 battery for the PS1811U UPS is sold separately. All power supplies feature “F” type female DC connectors for compatibility with the R-ONU connectors.

**PS1921W-10: Universal AC voltage input range (100 – 240 V<sub>AC</sub>)**

- Multi-country mains connector types
- Meets International and USA Department of Energy (DOE) Class VI efficiency specifications
- Connects directly to the R-ONU, eliminating the PS1900-ADP DC to F-type adapter
- Supports all ARRIS CP8x R-ONUs requiring external power supplies

**PS1911W-00: 120 V<sub>AC</sub> with USA NEMA 1-15P AC connector and wall plate securing lug**

- Supports ARRIS standard (non OBI-free) R-ONUs

*May not meet local efficiency regulations, thus limiting use in certain countries. Operating temperature range may be less than that of the powered ONU.*

**PS1811U: Uninterruptable Power Supply (UPS)**

- Supports all ARRIS CP8x R-ONUs

**PS1000: 1.2 GHz Power Inserter**

A class-leading power inserter that provides maximum isolation between the power supply and the RF ports, preventing ingress when the R-ONU is remotely powered via the RF coax. A PS1000 Power Inserter is included with standard SDU and MDU non OBI-free R-ONU orders.

SPECIFICATIONS	
Characteristics	Specification
<b>AC Wall Adapters</b>	
<b>PS1911W-00</b>	120 V <sub>AC</sub> (nominal) USA type adapter with 12 V <sub>DC</sub> output on "F" connector
AC input voltage	108 – 132 V <sub>AC</sub> , 60 Hz
AC input connector	NEMA 1-15P (NP)
DC output voltage	12 V nominal @ 500 mA
DC output connector	ANSI/SCTE 02:2006 Type F Female
Surge protection	1 kV min (per IEEE/ANSI C62.41)
Safety	UL 13210/CSA C22.2 No. 223-M91
Operating temperature	-10° to +40°C (+14° to +104°F) NOTE: Operating range may be less than that of the powered ONU. Indoor mounting suggested.
Storage temperature	-20° to +80°C (-4° to +176°F)
Humidity	5% to 95% non-condensing
Dimensions	2.3" W x 3.0" H x 2.0" D (5.8 cm x 7.6 cm x 5.0 cm)
Weight, typ	1 lb (0.45 kg)
Efficiency	May not meet certain country regulations. Check local regulations before use.
<b>PS1921W-10 Universal Power Supply Kit</b>	
AC input voltage	100 – 240 V <sub>AC</sub> , 50/60 Hz
AC input connector	Three interchangeable adapters: NEMA 1-15P (NP), CEE 7/16 and BS1363 (USA, EU, and UK styles). USA adapter features a mounting lug to secure adapter to the wall outlet.
DC Output	15 V <sub>DC</sub> @ 1.5 A maximum
DC output connector	ANSI/SCTE 02.2006 compliant F-type Coax Connector
Surge protection	6 kV combination wave per IEEE/ANSI C62.41
Operating temperature	-10° to +40°C (14° to 104°F) @ 1.5 A max output current. NOTE: Operating range may be less than that of the powered ONU. Indoor mounting suggested. -40° to +85°C (-40° to 185°F) @ 600 mA max current
Storage temperature	-40° to +85°C (-40° to 185°F)
Operating/Storage Humidity	5 to 95% RH, non-condensing
Dimensions	1.69" W x 3.35" H x 1.93" D (4.3 cm x 8.5 cm x 4.9 cm)
Weight	0.26 lb. (0.12 kg)
EMC	CE, BSMI, FCC, and VCCI compliant
Safety	IEC 60950-1; EN 60950-1; UL 60950-1
Efficiency	Meets International and US DOE Class VI Specifications
<b>Power Inserter</b>	
<b>PS1000-00</b>	
Operating Frequency	5 – 1218 MHz
Insertion loss RF to RF + Power	1 dB Maximum
Return Loss	18 dB 10 MHz to 1218 MHz
Isolation	65 dB minimum
5 – 200 MHz	85 dB typical
200 – 1000 MHz	75 dB typical
1000 – 1218 MHz	70 dB typical
RF Shielding	105 dB Minimum per ANSI/SCTE 48-2; 2008 extended to 1218 MHz
Operating Temperature	-40° to +65°C

**SPECIFICATIONS CONTINUED**

Characteristics	Specification
<b>Uninterruptible Power Supplies (UPS)</b>	
<b>PS1811U-00</b>	Please review the data sheet document # 87-10933 for complete specifications
AC input voltage	100 – 240 V <sub>RMS</sub> @ 0.5 A maximum, 50/60 Hz
Input frequency	50/60 Hz
AC Input connector	IEC 320/C6 inlet
Power cord	IEC 320/C5 to NEMA 5-15
Output voltage	13.5 V <sub>DC</sub> nominal
Operational output power	8 Watts max
Output connector	ANSI/SCTE 02.2006 compliant F-type Coax Connector
Dimensions	8.75" W x 7.75" H x 3.0" D (22.2 cm x 19.7 cm x 7.6 cm)
Weight	1.3 lb (0.59 kg); battery: 5.7 lb (2.6 kg)
Operating temperature	-20° to +45°C (-4° to 113°F) NOTE: Operating range may be less than that of the powered ONU. Indoor mounting suggested.
Storage temperature	-20° to +45°C (-4° to +113°F)
Humidity	5% to 95% non-condensing
Safety	UL/CSA/EN 60950-1
EMC	FCC Part 15 Class B, EN 55022, EN 55024
Environmental	CE, RoHS compliant
Model identification	Alpha FlexPoint FPR1208-F
<b>UPS Battery (Sold separately)</b>	
<b>PS1801B-00</b>	12 V <sub>DC</sub> Standby Battery for PS1811U-00 UPS
	7.2 AH AGM battery
	Provides approximately 10 hours of backup at 6 W (or 20 hours at 3 W) to 25% reserve point shut-off, based on new, fully-charged battery
	Hot-swappable
	Recharge time 18 hours to 90%
	Uses maintenance-free sealed-lead acid
Battery storage	-20° to +40°C (-4° to 104°F), six months maximum storage duration at +25°C (+77°F) without a recharge

**RELATED PRODUCTS**

RFoG R-ONUs	CH3000 Chassis and NH4000 VHub RFoG/RFPON modules
OBI-free R-ONUs	OR3144H, OR41x8H Diplexer/Receivers

**Customer Care**

Contact Customer Care for product information and sales:

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**Note:** Specifications are subject to change without notice.

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