

OpenWay®

RFLAN Range Extender DC Power Supply

Challenges such as geography and low meter density sometimes can limit the extensibility of the OpenWay radio frequency local area network (RFLAN) in certain areas. The OpenWay RFLAN Range Extender increases the reliability of the RFLAN mesh in geographically sparse regions.

The RFLAN Range Extender acts as a node within the network and routes packets and information just like any other meter or smart grid device within the OpenWay RFLAN. Designed for flexibility, the RFLAN Range Extender can be installed in a variety of wall- or polemounted configurations, such as vertical poles or horizontal davit arms, for optimal communication effectiveness and range.

Occasionally, it is necessary to mount Range Extenders on occupied structures which may result in additional safety requirements from state and local regulations. These safety requirements are in the form of an approval from Underwriters Laboratory (UL) or other similar organizations. To satisfy this requirement, Itron designed the RFLAN Range Extender to utilize a 24V DC input which is provided by a UL-approved power supply. This UL-approved power supply will enable customers to install Range Extenders on occupied premises.

FEATURES

The DC power supply is an approved device designed to support up to three Range Extenders at a distance of 300 feet each. Itron recommends the use of 18 AWG wire for DC connection between the Range Extender and the power supply. The power supply should be installed by a licensed electrician in accordance to local codes and regulations.

SPECIFICATIONS

Physical

- » Color: light gray with a high-gloss finish
- » Security: pad lockable, tamper screw capable
- » Operating Temperature Range: -30° C to 70° C
- » Weight: 2.5 lbs (In packaging)

Power Supply

- » UL/CSA approved/listed
- » Input Voltage: Auto ranging 90V 264V AC input
- » Output Voltage: -24V DC
- » Output Power: max 20 Watts (0.84A)
- » Requires ≤20A BCP
- » Withstand Voltage: I/P-O/P:3KVAC
- » Isolation Resistance: I/P-O/P:>100M Ohms/500VDC/25/70% RH
- » Harmonic Current: Compliance to EN61000-3-2 Class A, EN61000-3-3
- » EMI Conduction and Radiation: Compliance to EN55022 (CISPR22) Class B
- » EMS Immunity: Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A

INSTALLATION

Input Terminals: Control Circuit (Class I)

- » 120/0.6 Amp 230/0.4 Amp load
- » 20 Amp max. branch circuit protection and disconnecting means provided by installer
- » Use 14 AWG copper conductors 90c
- » Terminal Torque: 5 in./lbs

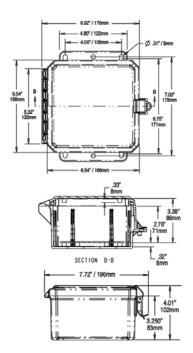
Output Terminals: Control Circuit (Class II)

- » Use Class II conductors
- » Recommend 18 AWG
- » Terminal Torque: 5 in./lbs
- » Ground Terminal: Use copper conductors only (14-8 AWG)
- » Terminal Torque: 20 in./lbs

When field wiring input circuit (Class I), install in the left side only. If field wiring output circuit (Class II), install in the right side only. Always maintain a separation of two inches between input and output wiring. Be certain to use conduit fittings or cord grips matching the use required for UL Type 4X or 12.

Local codes, regulations and customer preference will determine if the outdoor-rated cable with gland-style connectors and/or conduit is utilized for AC power feed and DC output to Range Extender(s) between the RFLAN Range Extender and the power supply.

DIMENSIONS



DC POWER SUPPLY INTERIOR



DC POWER SUPPLY INTERIOR DETAIL





Itron is the leading provider of energy and water resource management solutions for nearly 8,000 utilities around the world. We offer end-to-end solutions that include electricity, gas, water and heat measurement and control technology; communications systems; software; and professional services. With nearly 10,000 employees doing business in more than 130 countries, Itron empowers utilities to responsibly and efficiently manage energy and water. To realize your smarter energy and water future, start here: www.itron.com

CORPORATE HEADQUARTERS

2111 N Molter Road Liberty Lake, WA 99019 USA

Phone: 1.800.635.5461 **Fax:** 1.509.891.3355