



Point Repeater



900 MHz Antenna



Field Verifier
(900 MHz shown)



Wireless Accessories

RLE has accessories for the Wireless Gateway (FDS-Wi) to expand its capabilities and ensure proper operation. These accessories include the following:

Point Repeater (Wi-PR)

The Wi-PR is a 418 MHz RF receiver with an integrated 900 MHz transmitter. It receives error-checked data packets from wireless 418 MHz sensors, processes the data, and then transmits the data to RLE 900 MHz devices. Multiple repeaters can coexist and can communicate with the FDS-Wi wireless gateway and other Wi-PR mesh repeaters.

The Wi-PR provides a means for extending the range of 418 MHz battery-powered sensors and controls into a mesh network of 900 MHz wireless point repeaters (Wi-PRs) and Ethernet-connected servers and managers. As many as 26 layers of Wi-PRs can coexist.

900 MHz Antenna

This antenna is ideally suited for applications such as wireless vending, security, traffic, or power equipment, which require an unobtrusive, tamper-resistant antenna solution. An integral counterpoise eliminates the need for a proximity ground plane. The antenna's co-ax feed is available with SMA or RP-SMA terminations.

Field Verifier

The 418 MHz Field Verifier measures how far the wireless transmitter signal for 418 MHz sensors will go in a specific installation. The 900 MHz Field Verifier is an RF transceiver field tool that verifies how far the wireless transmitter signal for 900 MHz sensors or the Point Repeater will go in a specific installation. Each verifier is equipped with an LED and sounder indicating packet reception from the other verifier. Units are used in pairs with one unit as the transmitter and the other unit as the receiver.

Features

Point Repeater

- Wireless with compact enclosure
- Up to 26 layers in a mesh network
- Moisture resistant coating
- Complies with Part 15 of the FCC rules

Antenna

- Unobtrusive
- Tamper resistant
- Integral counterpoise
- Indoor / outdoor
- Adhesive or permanent mount

Field Verifier

- Validates RF operation with a simple site visit
- Identifies radio positions before installation
- Battery operated for easy survey mobility
- Automatic battery power management

Benefits

- Easy installation
- Wi-PR simple to relocate
- Reliable communication
- Durable for moist environments
- FCC-certified transmitters (Wi-PR and Field Verifier)

Monitoring & Notification

Wi-PR Specifications

Power	6-24 VDC @ 300mA
Transmission Frequency Range	418 MHz receiving 900 MHz spread spectrum transceiver mesh repeater Up to 300 ft. (91.4m) indoors
Operating Environment Temperature Humidity	32°F to 158°F (0°C to 70°C) 5% to 90% RH, non-condensing
Storage Temperature	-40°F to 185°F (-40°C to 85°C)
Dimensions Enclosure	3.3" W X 3.3" H X 1.4" D (83.82mm W x 83.82mm H x 35.56mm D)
Weight	6.44 oz. (182.6g)
Mounting	Wall mount or free-standing (for ease of relocation)
Certification	FCC Part 15, Class B; FCC ID: OUR9XSTREAM

900 MHz Antenna Specifications

Center Frequency	916MHz
Recommended Operating Frequency	900-930MHz
Wavelength	1/4-wave
VSWR	<1.9 typ. at center
Impedance	50 ohms
Connector	RP-SMA or SMA

Note: Electrical specifications and plots measured on 24"x 24" reference ground plane.

Field Verifier (418MHz & 900MHz) Specifications

Battery Power	BA/FV418, (2) 3.6V Lithium; BA/FV900, 9VDC
Auto Off	BA/FV418: 17 min.; BA/FV900: 1 hr.
Storage/Operating Temperature	32°F to 158°F (0°C to 70°C)
Frequency/RF-Power/Transmission Time	BA/FV418K: 418MHz/1mW / approx. every 10 sec.; BA/FV900K: 900MHz/100mW / approx. every 1 sec.
Receiver Sensitivity	418MHz: 112dBm; 900MHz: 110dBm
Typical Open Air Range	418MHz: 100 ft. (30.5m); 900MHz: 1,000 ft. (304.8m)
Indicators Sound Visual	50dB @5 ft. (1.5m) beeper (Off selectable) BA/FV418: 10-element LED, approx. 6dB per element BA/FV900: 2 LEDs, 1 transmit & 1 receive
Antenna	Detachable whip (must be installed to operate)
Weight	0.5 lb. (0.23kg) per unit
Certifications	418MHz: FCC ID T4F060911TEMP 900MHz: FCC ID OUR9XSTREAM



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104 Racquette Drive
Fort Collins, CO 80524
970.484.6510
www.rletech.com