

## Overview

The wireless BACnet Router offers a complete BACnet internetworking solution for BACnet/IP (LAN or Wi-Fi), BACnet Ethernet, and BACnet MS/TP networks as well as an immediate IoT cloud interface.

The FS-ROUTER-BACW offers two RS-485 ports and is a cost-effective option for configurations of 64 or fewer BACnet MS/TP devices without the need for additional line drivers.

The BACnet Router has an easy one page configuration, greatly simplifying the installation process. The BACnet Explorer discovery feature allows the integrator to easily find all the BACnet devices connected to the router, greatly simplifying the commissioning process.

The BACnet Router has the unique ability to act as a Wi-Fi access point. Users can directly connect their mobile device to a BACnet Router without having to be on the facility's LAN or WAN to access the local applications.



## BACnet Router Features and Benefits

### Multiple BACnet Routing Connections

- BACnet/IP & BACnet MS/TP
- BACnet MS/TP & BACnet Ethernet
- BACnet MS/TP & BACnet MS/TP
- BACnet/IP & BACnet/IP
- BACnet/IP & BACnet Ethernet

### Ease of Use

- BACnet Explorer: discovers devices connected to the FieldServer BACnet Router for diagnostics and troubleshooting.
- BACnet Broadcast Management Device (BBMD) for a connection between different subnets, up to 50 devices supported on the Broadcast Distribution Table (BDT).
- Configure easily on the web using a PC or mobile devices without additional software installations.
- NAT support with secondary BACnet/IP connection for routing between public and private IP networks.
- Foreign Device Registration (FDR), exposing up to 147 devices details on different subnets.
- Wi-Fi access point allows for direct connection from any mobile device without having to be on the facility's LAN or WAN to access the router.
- **MSA Grid - FieldServer Manager** registration connects your devices to the cloud, allowing secure remote access for diagnostics, monitoring, alarming and configuration.
- On-board diagnostics allow easy troubleshooting for both serial and Ethernet communications.
- **FieldSafe** adds a wealth of security options, including: web configuration page authentication (self-signed certificates), robust user and password management features.

### Ease of Installation

- MDIX to use any Ethernet cable for commissioning and installation.
- DHCP to automatically obtain the IP setting from the network.
- FieldServer ToolBox makes it easy to find and diagnose all FieldServer BACnet routers on the network.
- Wide range of input power requirements for DC.

## MSA Grid - FieldServer Manager

Registering the BACnet Router on the FieldServer Manager, MSA Safety's tenant based IoT Cloud Platform, effortlessly connects your devices to the cloud, allowing secure remote access for diagnostics and configuration of your products in the field.

## Ordering Information

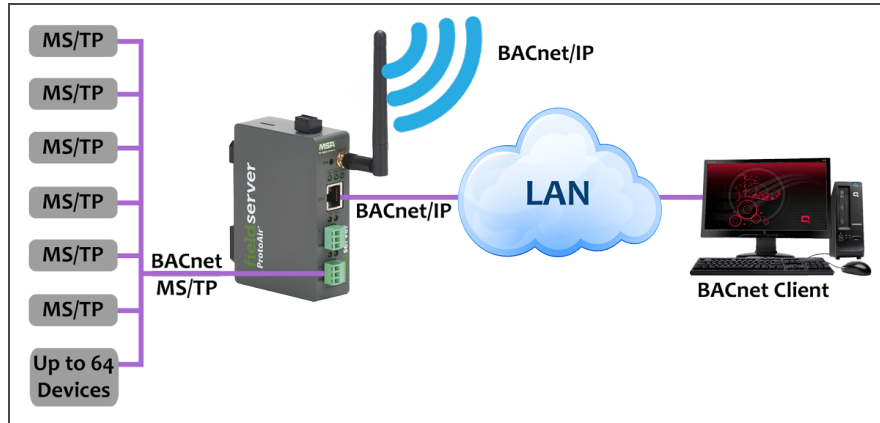
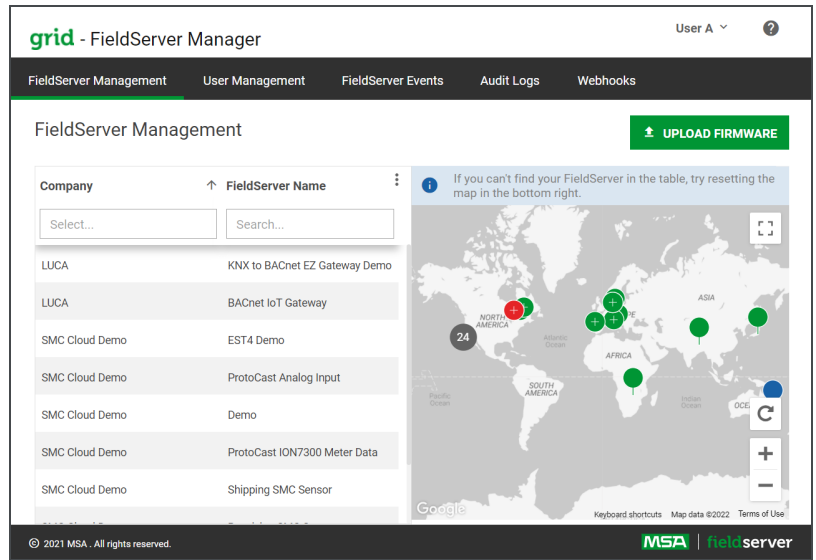
FS-ROUTER-BACW

## Options

The Accessory Kit consists of a power supply, Ethernet cable, screwdriver and a USB flash drive that includes all manuals, data sheets, notes and the discovery tool.

FS-8915-38-QS

Accessory Kit, 110/220V



## Hardware Specifications

### Communication

**Serial (Galvanic Isolation):** 2 x RS-485

**Baud:** 9600, 19200, 38400, 57600, 76800, 115200

**Ethernet:** 10/100BaseT, MDIX, DHCP

### Environment

**Operating Temperature:** -20 to 70°C (-4 to 158°F)

**Relative Humidity:** 10-95% RH non-condensing

### Radio – Wi-Fi 802.11 b/g/n

**Frequency:** 2.4 GHz

**Channels:** 1 to 11 (inclusive)

**Antenna Type:** SMA

**Encryption:** TKIP, WPA2 & AES

### Other

Web configuration

On-board diagnostics

DIN rail mount included

### Construction

**Dimensions (HxWxD)**

4 x 1.1 x 2.7 in (10.16 x 2.8 x 6.8cm)

**Weight:** 0.4 lbs (0.2 Kg)

### Power Requirements

**Input:** 24VAC 0.125A, 12-24VDC 0.25A

**Max Power:** 3W @12 VDC

### Approvals

CE and FCC part 15 B

BTL Marked

UL 60950-1 and CAN/CSA C22.2

UKCA compliant

RoHS3 and WEEE compliant

PTCRB and CTIA



Contact MSA sales for an easy proof of concept evaluation: [SMC-insidesales@msasafety.com](mailto:SMC-insidesales@msasafety.com).

## MSA Safety

1000 Cranberry Woods Drive, Cranberry Township, PA 16066 USA

O. +1 408 964-4443 TF. +1 800 727-4377 E. [SMC-insidesales@msasafety.com](mailto:SMC-insidesales@msasafety.com)

[www.MSAsafety.com](http://www.MSAsafety.com)