The WolfRadio-XM modules connect to 6-channel Particle Meters and add Wi-Fi and Bluetooth Low Energy (BLE) capabilities to the device. PC-3016, PC-3500, PC-4000 series and PC-5000 series Particle Meters are compatible.

The Wi-Fi allows data to be sent to the cloud (via optional GrayWolfLive) and BLE allows these Particle Meters to be used with GrayWolf's free WolfSense Mobile App on Android and Apple iOS devices without the need to connect via another GrayWolf platform. Display and log mass concentration such as PM2.5, PM10 as µg/m3 or mg/m3; (particle counts are not included for GrayWolfLive, Android or iOS devices at this time; contact GrayWolf for alternative options). Synchronize the 6-channel particulate mass readings with parameters from other GrayWolf devices such as DirectSense II multi-sensor IAQ/Toxic Exposure probes, and with WolfRadio-enabled Zephyr LDP barometric/differential pressure modules.

Access to the data is also available for custom application development.

Physical

- USB-C socket for configuration and for module charging/ powering (AC adapter not included).
- DC power barrel jack for alternative charging/ powering via included Y-splitter (ADY-WRXM). Uses the particle meters' AC adapter and can power the module and meter simultaneously.
- RJ-45 (WolfRadio-XM-3016) or 5-pin DIN (WolfRadio-XM-3500) connector to particle meter.
- Captive 1/4-20 UNC Tripod Thread to attach to particle meter (PC-3016 and PC-3500 only, the module is simply utilized in-line for PC-4000/5000 series meters). Hex tool included.
- Dimensions: 4 ¼ in x 1 ½ in x 1 ⅛ in (10.9cm x 3.8cm x 2.9cm).
- Weight: 4.0oz (110 grams).
- Recessed Reset Switch
- Power On/Off Button
- Battery Life: internal rechargeable lithium-ion; 16 hours typical.
- Status LED

ADY-WRXM Power Adapter

Bluetooth Low Energy (BLE)

Bluetooth: v4.2 BLE
BLE Pin Code Security Supported
Custom BLE Characteristics
Structure and UUID definitions available for OEM customers.
Operates with Android devices with the free GrayWolf WolfSense Mobile App available from the Google Play Store
Operates with iOS devices with the free GrayWolf WolfSense Mobile App available from the Apple Store

Wi-Fi

WolfRadio-XM modules can connect to 802.11 b/g/n (802.11n up to 150 Mbps) wireless networks. Modules are compatible with the following Wi-Fi network types:

WPA/WPA2-Personal – these are networks that typically use a pre-shared key (PSK) password that is distributed to all users of the network or have no password (open networks).

WPA/WPA2-Enterprise – these networks typically use user-credentials and/or security certificates to authenticate users of the network. The DSII is compatible with WPA/WPA2-Enterprise networks using the following protocols:
- **PEAP-MSCHAPv2**
- **TTLS-MSCHAPv2**

WolfRadio-XM can connect to WPA2-Enterprise networks with user credentials (RADIUS ID/ RADIUS Password/ Anonymous Login) that can be set in the Configuration Tool. The use of Server CA certificates to validate the server is an option, however, the use of client certificates for connection to EAP-TLS networks is not an option.

Data is sent to GrayWolfLive's server by default but can be configured to be sent as HTTP POST to an alternate server. Data is formatted as JSON text.

Configuration of Device

The WolfRadio-XM may be configured via the USB-C port using GrayWolf's free WolfRadio Config tool from any Windows PC.

GrayWolf Sensing Solutions

6 Research Dr
Shelton, CT 06484
Phone: (1) 203.402.0477

Annacotty Industrial Park, Unit 1C
Annacotty, County Limerick Ireland
Phone: (353) 61358044

www.GrayWolfSensing.com