RF310M & RF310B

RF Modem & Base Station for RF310-series Radios

Campbell Scientific's RF310M Modem and RF310B Base Station are used with the RF310-series radios only. They are compatible with our CR800*, CR850*, CR1000*, CR3000*, CR7, CR500, CR510, CR10(X), 21X, and CR23X dataloggers.
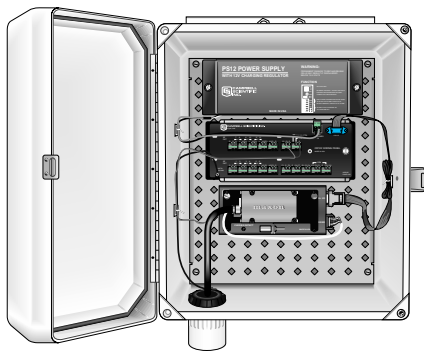
The RF310M modem functions as the communication interface between the datalogger and the radio. It's typically powered with the 5 Volts provided by the datalogger's serial I/O port. When the modem is at a non-datalogger repeater site, a PS100 Power Supply fitted with an A100 adapter is used to power the RF310M. Each RF310M contains dip switches that allow the user to address the modem with a number between 0 and 255.

The RF310B RF Base Station resides at the computer site and serves as a link between field stations and repeater stations. It consists of a 110/220 Vac to 12 Vdc transformer, RF310M modem, RS-232 port, internal mounts for an RF310-series transceiver, and 7026 cable. Because the RF310B is intended for desktop operation, enclosure mounts are not required nor supplied. AC power must be available at the computer site.

The RF310B Base Station support attended and unattended retrieval of the field station's data. AC power is required.

An RF310-series radio, LoggerNet Support Software, frequency-matched antenna, and antenna cable are purchased separately. More information is provided in the Narrow-band RF Networks brochure and RF310-series Radios brochure.

The contents of this RF field station enclosure are from top to bottom: 12 V rechargeable power supply, CR10X datalogger, RF310 radio, and RF310M modem (underneath radio). Antenna and most of cable not shown.

A CM10 tripod-based weather station can serve as a field station. This weather station uses a Yagi antenna to transmit the data.

Although compatible, PakBus dataloggers (e.g., CR800, CR850, CR1000, and CR3000) typically use the RF500M Radio Modem instead of the RF310M and RF310B.

Ordering Information

RF310M	RF Modem for RF310-series Radios (a PROM option must be specified)
-MA	Mixed-array PROM without sleep mode
-TD	Table data PROM without sleep mode
-MB	Modbus PROM without sleep mode
-AL	ALERT PROM without sleep mode
-XT	Extended Temperature Testing (-55° to +85°C)
RF310B	RF Base Station Package for RF310-series radios (a PROM option must be specified)
-MA	Mixed-array PROM without sleep mode
-TD	Table data PROM without sleep mode
-MB	Modbus PROM without sleep mode
-AL	ALERT PROM without sleep mode

Specifications

RF310M Radio Modem	
Power	35 mA at 5 Vdc (from pin 1 on the CS I/O 9-pin connector)
Temperature range	-25° to +50°C (standard), -55° to +85°C (extended)
Dimensions with connectors	7.8"x 3.3"x 1" (19.8 cm x 8.4 cm x 2.5 cm)
Weight	0.5 lbs (226.8 g)
RF310B Base Station	
Temperature range	-25° to +50°C
Connection	25-pin RS-232 port for connection to PC
Power	110 Vac
Weight	6.3 lbs (2.9 kg) without the radio