

Scanner Communications and Power Accessory Packages



Solar/Wi-Fi Accessory Package

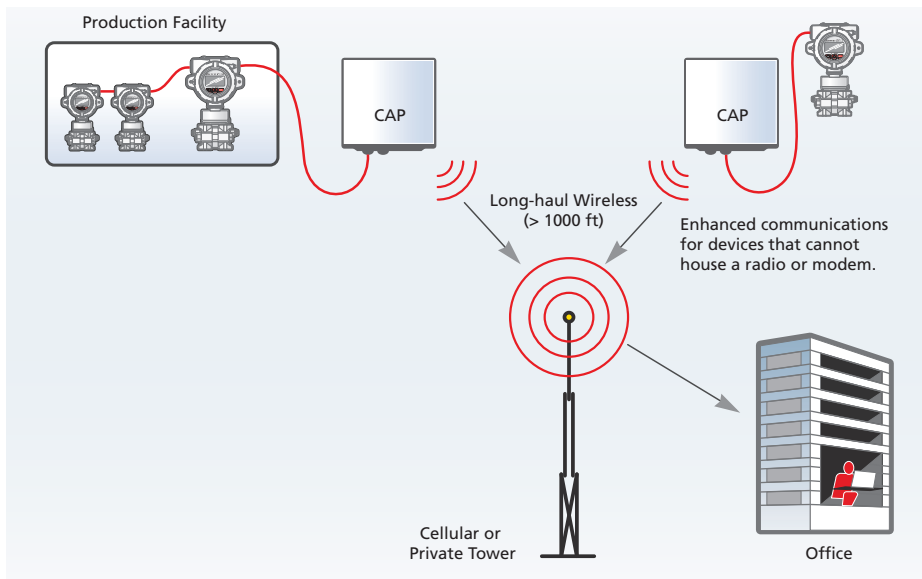
Automation of flow measurement and control requires remote access to equipment controls and data, but adding the necessary radios and power accessories can be a challenge.

Cameron's Scanner accessory packages provide an ideal solution by assembling the accessories inside a weatherproof box that is easily connected to a flow computer, laptop, or other equipment. Choose from two package designs.

Our Solar/Wi-Fi accessory package provides solar power for a flow computer and wireless communication to a laptop over short distances.

Our communications accessory package (CAP) provides added power and communications for automating measurement and control in a customizable design that can withstand the harshest environments.

Both packages are approved for use in a Class I, Division 2 area, and allow a user to connect to a Scanner flow computer located in a Division 1 area without entering the Division 1 hazardous area. Accessory packages simplify signal cable management and provide secure storage for communication equipment, automation devices, batteries, charge controllers, etc.



Communications Accessory Package (CAP)

Communication Accessory Packages



Cameron's communication accessory packages (CAPs) provide the supplemental power and communications required to automate remote measurement and control equipment, even in the harshest environments. A CAP is custom-assembled to meet the needs of a given application and can be integrated with any Scanner product.

Each package is housed inside a painted steel enclosure and configured to customer requirements. A package may include:

- Radio, modem or other communication device
- Primary or backup power source for powering a communication device, Scanner flow computers and analog or status circuits
- Solar panel
- One or more sealed lead acid batteries
- Battery charge controller
- Intrinsic safety barrier (where applicable)

Specifications

Enclosure

- NEMA4 painted steel
- Standard sizes (height x width x depth)
 - 16" x 12" x 6"
 - 20" x 20" x 8"
 - 20" x 24" x 8"
 - 30" x 30" x 8"
- Through-wall option (height x width x depth)
 - 30" x 30" x 8"
 - Holds up to four sealed lead acid batteries

Certification

- CSA Class I, Div. 2, Groups A, B, C and D

The communications accessory package can be AC-powered for use in powered field offices, or DC-powered for use in unpowered well sites. DC-powered packages are designed to support desired communication intervals while taking into consideration site-specific challenges, such as seasonally low solar radiation levels or reduced battery capacity due to low temperatures. If a heated structure exists near the installation in severely cold environments, a through-wall enclosure design may be preferred for enhanced battery performance.

Cameron's CAPs can include licensed and spread spectrum radios, GSM (cellular) modems, Bluetooth system interfaces, short-haul line drivers and traditional telephone modems. Lightning protection, antenna cable and antennas are also available for use with a customer-furnished mount or mast. Customers who plan to supply their own radio will appreciate the convenience of a package with a bracket and strap pre-installed and ready for mounting a radio.

Cameron staff are readily available to assist customers in selecting the right set of components for each application. Each package includes schematics and layout drawings and is thoroughly tested before shipment.



Communication Devices

- Licensed radios
- License-free radios
- Cellular modems (CDPD/GSM/GPRS)
- Any Class 1, Div. 2 certified device

Internal Power

- 12 VDC sealed lead acid batteries
- Total capacity: 300 Ah

External Power

Solar panel/charge controller

- Nominal 12 VDC solar panel
- Total solar capacity: 100 watt

- AC/DC power supply
 - 12 VDC to 24 VDC, 400 mA step-up
 - 24 VDC to 12 VDC, 2.5 amp
 - 110 VAC to 24 VDC, 2.5 amp
 - 110 VAC to 12 VDC, 5 amp power supply
 - 110 VAC to 12 VDC, 5 amp power supply with 12 to 24 VDC, 400 mA step-up
 - Any CSA-approved Class I, Div. 2 power supply

- Local DC power

Relays

- Solid state, 7A AC/DC max current

Terminal Blocks

- Standard
- Serial splitting, two-way for Tx/Rx/Gnd
- Fused
- Fused, indicating with knife disconnect

Serial Cable

- Cable with DB9 connector

Internal Antenna Cable

- Type N
- SMA
- TNC-F
- TNC-M
- UHF

Antenna and External Cable

- 6.5 dB, 10-ft or 30-ft cable
- 10 dB, 10-ft or 30-ft cable

Intrinsic Safety Barriers*

- For use with
 - Power inputs
 - Analog and discrete circuits
 - RS-232 circuits

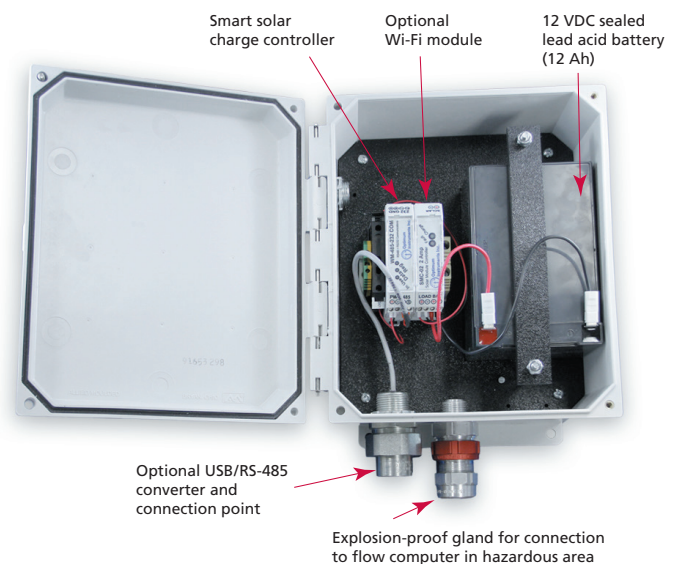
*Required for use with Scanner 1100 EFM/RTUs in Class I Div. 1 areas

Solar/Wi-Fi Accessory Package

Cameron's Solar/Wi-Fi Accessory package provides renewable solar energy to power a Scanner flow computer and supports wireless communication to a PC or similar device.

The accessory consists of a high-efficiency solar charge controller and a 12 VDC rechargeable lead acid battery for powering the scanner, and optionally, a Wi-Fi module. The charge controller optimizes available sunlight to increase the life of the lead acid battery for long-lasting performance even with frequent polling. With solar power as the primary power source, the Scanner's integral lithium battery serves as a backup power source to eliminate gaps in service should solar power be depleted.

Users can connect to the flow computer via the Division 2 accessory using a standard USB A-B cable and an optional USB port at the bottom of the accessory enclosure.



If wireless communication is desired, the optional Wi-Fi module may be the answer. With a Wi-Fi-enabled laptop, a user can collect data remotely—from a vehicle up to 330 ft (100 m) away, for example—without physically connecting the laptop to the Scanner. External antennas can increase the range. Alternately, the Wi-Fi module can be routed to a local LAN/WAN gateway and then to the internet for remote data access and control. The solar package can be upgraded to include Wi-Fi connectivity at any time.

Specifications

Enclosure	Weatherproof fiberglass-reinforced plastic or metal
Dimensions	10" x 8.25" x 4.13", wall mount or pole mount
Battery	12 VDC, 12 Ah, sealed lead-acid
Operating Range	-40° F to 140° F (-40° C to 60° C)
Charge Controller	Load current 0 to 2 A
Nominal Rating	12 V, 400 mA
Solar Panel Requirements	
Voltage Input	14 V to 21 V
Wattage	up to 30 watt
Approvals	CEC Class I Div. 2, Groups C and D, T3 (non-sparking)

Note: These specifications are subject to change without notice.

Options

Wi-Fi Module

Wireless 802.11a/b/g with internal antenna	
Sleep Current (at 13.2V)	540 μ Amp
Awake Current (at 13.2V)	16 mA
Voltage Input	6 VDC to 30 VDC 12 V nominal for Class I, Div. 2

External Antenna

USB/RS-485 Converter

(for use with user-supplied universal USB A-B cable)

RS-485 to RS-232 Converter Cable

Solar Panels

Class I, Div. 2 approved, 5 watt or 10 watt

Contact us

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