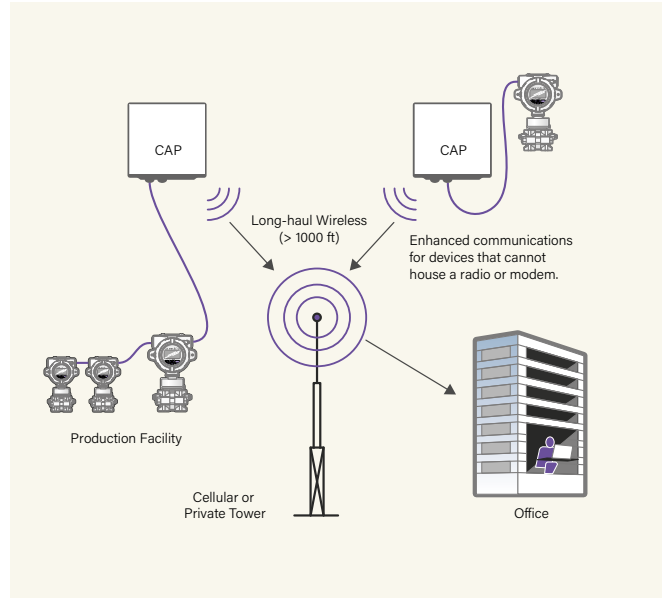


+ Scanner Communications and Power Accessory Packages



Solar/Wi-Fi Accessory Package



Communications Accessory Package (CAP)

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.

Sensia'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.

Communication Accessory Packages



Sensia'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)



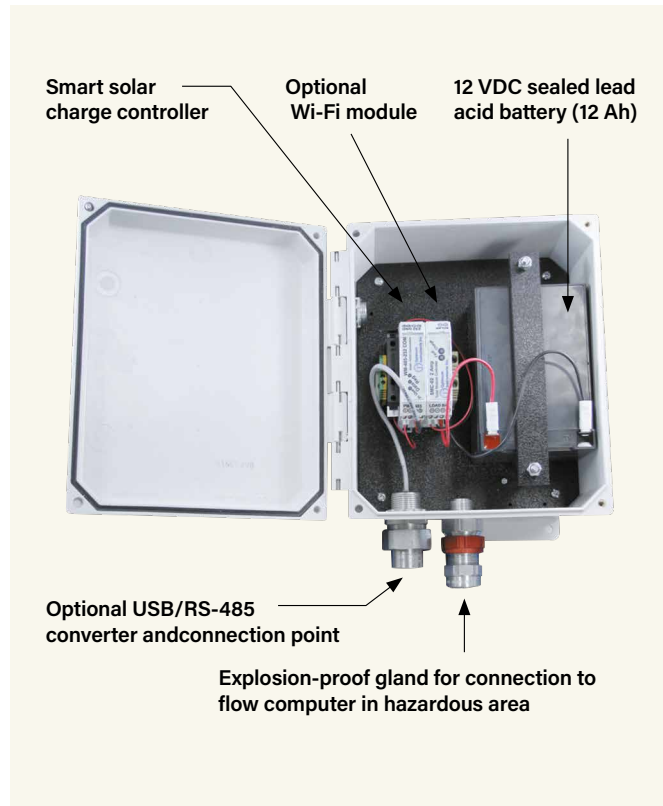
The communications accessory package can be AC-powered for use in powered field offices, or DC-powered for use in unpowered well sites. DC-powered packages are designed to support desired communication intervals while taking into consideration site-specific challenges, such as seasonally low solar radiation 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.

Sensia'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.

Sensia 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.

Specifications	
Enclosure	EMA4 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
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 Standard
Terminal Blocks	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

Sensia'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.

Scanner Communications and Power Accessory Packages

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	14 V to 21 V up to 30 watt

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