BLUE SKY ENERGY

UCM

Universal Communication Module

The Universal Communications Module (UCM) provides a full-featured communications gateway between your Blue Sky Energy IPN Network and the web. If you have a single IPN-compatible charge controller, or are operating a full, eight controller network, the UCM helps you monitor your system from anywhere. The UCM provides interfaces for RS485 and TCP/IP Ethernet communication based on Modbus protocol. A built-in HTTP web server allows users to view data and set system parameters via their browser from wherever they are online, without a subscription. Keep track of your system performance with 128 days of datalogging over key performance parameters. Download the data in Excel (.csv) format or take the UCM with you for filed download and analysis.

Monitoring and Settings •

RS485, Ethernet, IPN •

IPN Network compatible •

TCP/IP connection •

Product Features

- Standard Modbus RTU via RS485 and Modbus/IP
- TCP/IP connection and embedded Ethernet HTTP web site server
- Resists corrosion with conformal coating

System Monitoring

- Periodic HTTP data upload to remote server
- 128 days of system Performance datalogging available as downlodable Excel (.csv) file
- The datalog file provides all the information received from IPN display network

Compatibility

- Single or multiple Charge Controller on an IPN network with or without IPN remote display

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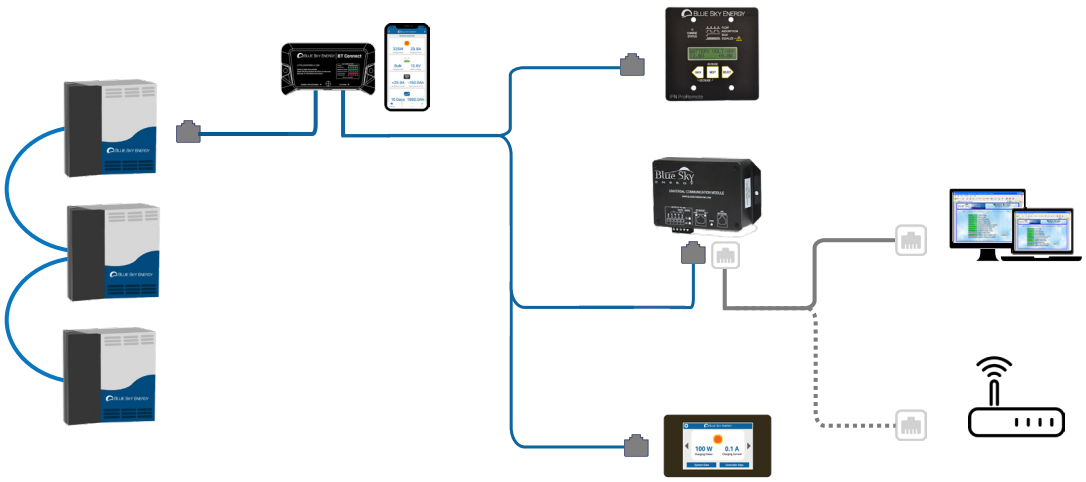
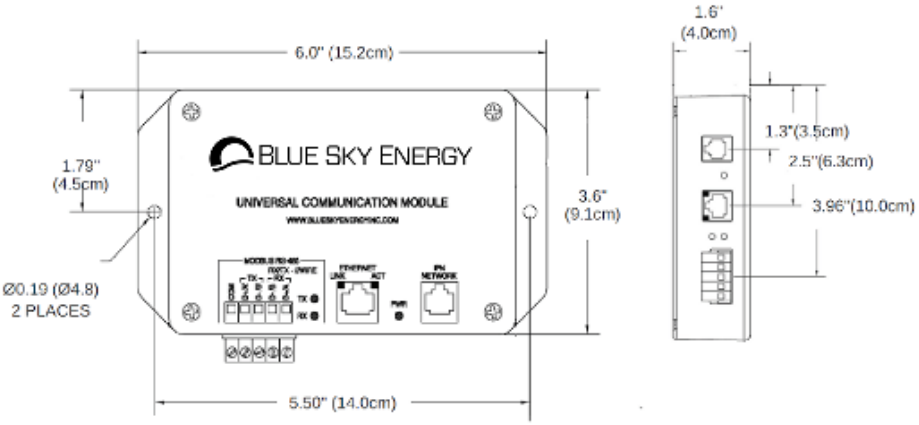
Specifications:	UCM
Power Consumption:	0.9 W provided by charge controller
IPN Network:	RJ-11 Phone jack, 7’ (2.1 m) 4-wire swap cable
Ethernet:	Standard Ethernet TCP/IP 10Mbps, RJ-45 connector 3'(0.9m)
Modbus:	Standard Modbus RTU, slave address 1-247 via RS-485 or Modbus/IP
FTP Upload:	Up to 33 key performance parameters for up to 128 days. Datalog downlodable on Excel (.csv) file
HTTP Web Site Driver:	Delivers HTTP web site for data view, parameter setup and data log file download to two locations simultaneously. Web site via router or LAN. Directly connection to PC via CAT5 crossover cable.
Datalogging:	Communication via 4-pin telephone cable length to 500’ (152 m). Current shunt via twisted pair cable length to 300’ (91 m)
	Full Datalog data
Operating Temperature:	-40 °C – 50 °C
Environmental Protection:	IP30
Weight:	0.39 lb. (178 g)
Dimensions:	6.0 x 3.6 x 1.6" (15.2 x 9.1 x 4.0 cm)
Warranty:	5 years
Certifications:	RoHS

Blue Sky Energy Communication System



Dimensional Drawing