LEVITON

EMB Hub

Data Acquisition Server

The Leviton EMB Hub is an intelligent, flexible data acquisition server allowing users to collect energy data from meters and environmental sensors through ModBus protocol. Designed to connect to IP-based applications such as enterprise energy management, demand response and smart grid programs, the EMB Hub server lets you connect thousands of energy points, benchmark energy usage and reduce energy costs.

EMBEDDED (OEM) SOLUTION
The compact EMB footprint and industrial temperature range (-30° to 70°C) makes this a perfect solution for embedded applications. Reduce development time and speed up integration by collecting and distributing energy information directly from your equipment.

DATA COLLECTION
The EMB Hub collects and logs data from connected (wired or wireless) devices based on user selected intervals. Data from downstream devices is time stamped and stored locally in non-volatile memory until the next scheduled upload or manual download. Using an Ethernet (LAN) connection you can push or pull data via HTTP, XML, FTP or any custom protocol utilizing our EMB Hub Module to build your own application, including integrated cellular communication options.

INSTALLATION & FEATURES
No software is required. Easily access information through ANY web browser. There are several additional features including alarming, SNMP Traps, network configuration, wireless diagnostics, USB, security provisions and backlit LCD. Our integrated meter driver library is designed to speed up installation and lower integration costs through "plug-and-play" connectivity.

COMPATIBILITY
The EMB Hub is compatible with nearly any front-end software platform allowing customers to use a variety of reporting tools; whether it's a local server or an enterprise wide reporting suite.

APPLICATIONS
- Measurement and verification (M&V)
- Tenant billing
- Reduce energy costs
- Access energy information from local or remote sites
- Benchmark building energy usage
- View "real time" performance data
- Track energy use and peak demand for Demand Response programs
- Monitor performance of critical systems (lighting, HVAC, PDUs, inverters, etc.)
- Alarm notification for data points above or below target levels (including SNMP Traps)
- Monitor renewable energy performance and production
- Push or pull meter data to energy dashboards, kiosks and software applications
- LEED / Energy Star certification

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SPECIFICATIONS	
Processor	ARM9 embedded CPU
Operating System	Linux 2.6
Memory	32 MB RAM
Flash ROM	16 MB NOR Flash (expandable with USB memory device)
Interval Recording	1 to 60 minutes, user selectable (default 15 minutes)
LEDs	Ethernet, Modbus TX/RX, power, alarm
Console	2 x 16 LCD character, two push buttons
POWER	
Power Supply	24VDC, 500mA *This unit is to be sourced by a Class 2 power supply with the following output: 24VDC, 500mA min not to exceed 8A
Isolation	RJ45 Ethernet and RS-485 port are isolated to 1500VDC from the main board. (Power and USB non-isolated)
COMMUNICATION	
Protocols	Modbus/RTU, Modbus/TCP, TCP/IP, PPP, HTTP/HTML, FTP, NTP, XML, SNMP-Trap
LAN	RJ45 10/100 Ethernet, full half duplex, auto polarity
USB	USB expansion port
INPUTS	
Serial Port	RS-485 Modbus, supports up to 32 external devices (expandable)
PHYSICAL	
Weight	0.42lbs (0.19kg)
Size	4" x 4.25" x 2" (102mm x 108mm x 51mm)
ENVIRONMENT	
North America	-30 to 70C, 95% RH, non-condensing
Altitude	2000M max
Pollution	Degree 2
CODES AND STANDARDS	
FCC CFR 47 Part 15, Class A, EN 61000, EN 61326, CE, UL61010 Recognized	
ADDITIONAL NOTES	
NEMA enclosures available upon request	
Cellular modems available upon request	
Manufactured in the USA	

ORDERING INFORMATION

CAT. NO	DESCRIPTION
A8810-000	EMB Hub
YBM07-001	Power Brick

NOTE: The Power Brick is required to power the EMB Hub but is not included and must be ordered separately.

LEVITON SPECIFICATION SUBMITTAL	
JOB NAME:	CATALOG NUMBERS:
JOB NUMBER:	