Node M50

PRODUCT OVERVIEW

Problem: Restaurants, dormitories, hotels, offices, and homes want to manage their electrical bills efficiently. They need to have real-time electrical power consumption information and to be able to turn off and turn on power upon request from a centralized PMS server. The system should provide sufficient level of automation to turn on and turn off power based on time, usage, and account status.

Solution: SysMaster Corporation offers an inexpensive business SmartPower M50 Node that has WiFi 802.11n interface, USB port, and multiple Ethernet ports. The device can function as a stand-alone unit to control remotely single and multiphase power meters using its integrated Linux software. The device controls the power meters using either wireless ISM 866Mhz link or RS232/RS485 cable. It can also work with a centralized Power Management Server (PMS) using secure VPN connection. The device can control, monitor, and manage electrical appliances in real- time with time or usage based billing algorithms.



SmartPower M50 Node supports an advanced single phase or multiphase power meters that can measure the consumed electricity and supply the data to the local database or the central Power Management Server. SmartPower M50 Node can manage and collect data from multiple power meters. In addition, the device can send commands to setup the internal clock, turn on and turn off the built-in master switch, and reset energy counters.

Power Management software with time and usage management

SmartPower M50 Node supports integrated advanced software that can collect power meter data and send commands to the managed power meters via ISM Wireless or serial protocols. The software will allow power management and time and usage based billing. It supports automatic management of the power meters based on time of day, and usage quota and automatically turns on and turns off power if configured.

Support for ISM Wireless and RS232/RS485 connection

SmartPower M50 Node supports USB port that can allow interface to ISM Wireless USB dongle to send the wireless data and commands from/to the managed power meters. The ISM Wireless connection allows greater distance between the M50 node and the managed power meter. SmartPower M50 Node can also interface the power meters using RS232/RS485 serial converter. This protocol requires a physical 4-wire cable to connect to each managed power meter.

Linux OS with support for secure VPN server connection

SmartPower M50 Node supports integrated Linux software with high-level of security. The node can interface from behind firewall or NAT network to a central server using VPN (virtual private network) encrypted connection. This will allow secure and reliable connectivity and real-time management of all power meters from the central Power Management Server (PMS).



■ KEY FEATURES

- Management of Power Meters with built-in master switch
- Power Management software with time and ent usage management
- Support for ISM Wireless and RS232/RS485 connection
- ☐ Linux OS with support for secure VPN server connection
- ☐ Wireless 802.11n, WAN and LAN network interfaces
- DHCP services with Private IP address assignment
- Web administration and configuration



SmartPower M50 Node supports multiple interfaces such as Wireless 802.11n, WAN, and LAN interfaces. The router can be easily integrated with any type of ADSL, 3G, or cable modem. The integration is similar to the one supported by most popular Wifi routes available on the market. All supported interfaces can be authenticated and secured utilizing different security mechanisms

DHCP services with private IP address assignment

SmartPower M50 Node supports DHCP services and allows assignment to multiple private IP addresses using the Wireless and LAN interfaces. This allows seamless connection via Wireless devices as well as wired local PC computers.

Web administration and configuration

SmartPower M50 Node supports advanced web management to provide selection among various network options, dialogs, and power management options. The Web interfaces is user friendly and easy to navigate and use.

Technical Specifications *

150Mbps WiFi b/g/n 4x 10/100Mbps LAN Ports

1x 10/100Mbps WAN Port

SoC: MT7620N CPU: 400Mhz RAM: 64MB Flash: 16MB

WiFi: IEEE 802.11n, IEEE 802.11g, IEEE 802.11b

2x5dbi Antennas

Frequency: 2.4-2.4835GHz

Wireless Functions: Enable/Disable Wireless Radio, WDS Bridge, WMM,

Wireless Statistics

Wireless Security: 64/128/152-bit WEP / WPA / WPA2, WPA-PSK / WPA2-

PSK

Advanced Power Management Software Advanced Linux Operating System

WAN Type: Dynamic IP/Static IP/PPPoE/PPTP/L2TP/BigPond DHCP: Server, Client, DHCP Client List, Address Reservation

Quality Of Service: WMM, Bandwidth Control

Port Forwarding: Virtual Server, Port Triggering, UPnP, DMZ

Dynamic DNS : DynDns, Comexe, NO-IF

VPN Pass-Through: PPTP, L2TP, IPSec (ESP Head)

Access Control: Parental Control, Local Management Control, Host List,

Access Schedule, Rule Management

Management: Access Control, Local Management, Remote Management

Dimensions: 139mmx8

139mmx85mmx24mm

Specifications subject to change without notice.



SysMaster

2700 Ygnacio Valley Rd, Suite 210 Walnut Creek, CA 94598 United States of America

Email: sales@sysmaster.com Web site: www.sysmaster.com

Notice to Recipient: All information contained herein and all referenced documents (the "Documents") are provided subject to the Terms of Service Agreement (the "Terms") found on SysMaster website http://www.sysmaster.com (The "Site"), which location and content of Terms may be amended from time to time, except that for purposes of this Notice, any reference to Content on the Site shall also incorporate and include the Documents. The Recipient is any person or entity who chooses to review the Documents. This document does not create any express or implied warranty by SysMaster, and all information included in the Documents is provided for informational purposes only and SysMaster provides no assurances or guarantees as to the accuracy of such information and shall not be liable for any errors or omissions contained in the Documents, beyond that provided for under the Terms. SysMaster's sole warranty is contained in the written product warranty for each product. The end-user documentation shipped with SysMaster products constitutes the sole specifications referred to in the product warranty. The Recipient is solely responsible for verifying the suitability of SysMaster's products for its own use. Specifications are subject to change without notice.