SMART WIRELESS GATEWAY

>>> SMART MONITORING & TESTING SOLUTIONS

SMARTGATE

WIRELESS GATEWAY FOR LONG-RANGE WIRELESS DATA TRANSFER
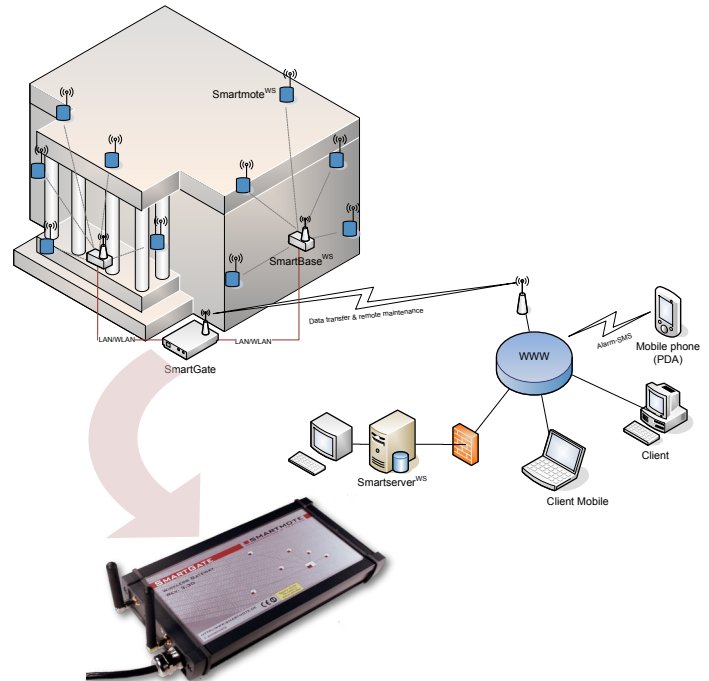
» OUTDOOR USE

» GSM/GPRS CONNECTIVITY

» GPS GLOBAL POSITIONING SYSTEM

» LOW POWER OPERATION

SmartGate

⠿ Long-Range Wireless Data Transfer

Product description

The SmartGate is a stand-alone gateway that provides long-distance data-transfer per GSM/GPRS-Modem from the monitoring site to the end-user. The gateway is designed to withstand harsh environments and multiple power supply options guarantee its worldwide application. To allow for fully autonomous operation in applications where no electric power is available, the SmartGate could be equipped with solar cells and secondary batteries. The SmartGate supports USB, Ethernet, RS232 and optionally SPI, I^{2}C, UART, RS 485 (additional interface board). The integrated IEEE 802.15.4-compliant radio bridges the wireless sensor network to local wireline infrastructure or even wireless to the internet.

⠿ Key Features

Main Specifications

» GSM/GPRS Module GE863-PRO³, QUAD-BAND

» GPS Module 3M (SiRF 3/LP)

» CPU ARM 9 integrated (200 MIPS) (Core AT91SAM9260)

» 64 MB RAM for applications

» Non volatile data flash 4 MB (up to 128MB onboard)

» Data flash extension SD card or MMC card

» 2.4 GHz transceiver for wireless sensor network data transmission

» Interfaces Serial CMOS and +/- 5V driver, JTAG, Ethernet (10 Base-T connector with PoE) USB, I^{2}C, SPI, GPIO

» SIM Holder onboard

» Embedded Linux onboard (as default, Kernel 2.6.x)

» Multiple power supply options: Internal Mains Voltage Converter 110V to 230V; Optional: 12V to 24V application with Relay Driver 200mA active-low; Optional:

Internal Pin-Connector for external DC-Supply 12V to 48V; Power over Ethernet (not isolated)

» Operating Temperature Range -25 to +70ºC

» Dimensions 250 x 154 x 38 mm³ (in case)

» Weight 1.2 kg (in IP 65 case)

Peripherals

» USB Host Connector (max. 200mA)

» Internal second USB Host Pin-Connector (max. 200mA)

» USB Device Connector (no supply via USB)

» Sub-D 9pin Connector RS232 (DCE), 2 and 4 Wire Communication, configurable for programming / debugging

» Internal Pin-Connector for programming / debugging (C-MOS 3.1V)

» Internal Pin-Connectors for 2 LED or 2 Ports

» Optional: Internal Pin-Connector for JTAG

» Optional: Internal Pin-Connectors for small optional IO-Interface Board (GPIO, SPI, I2C, UART, RS 485 ext. DC-Power)

» SMA Reverse Antenna Connector for Wireless Sensor-Net Communication at 2.4GHz

» SMA Antenna Connector for GSM: GSM-850 / 900 Class 4, DCS–1800 / PCS–1900 Class 1

» U.FL Connector for GPS (internal)

» Real Time Clock

» SPI, I2C, UART, RS 485 ext. DC-Power)

» SMA Reverse Antenna Connector for Wireless Sensor-Net Communication

» SMA Antenna Connector for GSM: GSM-850 / 900 Class 4, DCS–1800 / PCS–1900 Class 1

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