

GSM-2000-SMP compact stand-alone HMI and web server



Overview

- Human Machine Interface (HMI) and web server.
- Supports BACnet IP, BACnet MS/TP, Modbus 485, Modbus TCP and LonWorks.
- Alarm monitor, runtime accumulator.
- Trend collector.
- Simple logic controller.
- Point translator system.
- Up to 2000 points and 4 simultaneous protocols.
- Programmed by browser, no tools needed.
- 24/7 reliability.
- Linux security.
- No licensing fees, per-point charges, certification classes, special software or tools.
- PC not required on the job site.
- 2 USB, 1 Ethernet Connection

Applications

Residential

Small/medium offices

Remote monitoring and management

General

- GSM-2000-SMP HMI is a stand-alone, embedded, web-based graphical interface for building automation and process/access control systems. Multiple protocols are supported including Modbus RTU/485, Modbus TCP, BACnet IP & MS/TP and Lon Works.
- Features include animated graphic screens, scheduling, historical trending, runtime accumulation and alarm monitoring. All features are supported, even with devices that do not natively support them. GSM-2000-SMP will automatically toggle outputs and change setpoints on schedule, collect runtime and trend data, and monitor alarm conditions.
- GSM-2000-SMP uses Flash memory for internal storage. It contains no hard disk or other moving parts. The Linux operating system is used for enhanced security and stability.
- GSM-2000-SMP is totally self-contained. All set up and user interactions are performed via a web browser. No dedicated PC or external applications are required. The user interface utilizes Adobe Flash to allow for advanced graphical features, platform-independence and drag and drop setup. Absolutely no knowledge of HTML, XML, Flash, JavaScript or any other programming language is required to set up or use GSM-2000-SMP.

Name

G S M - 2 0 0 0 - S M P

Type -

Points - 2000

Series - Gateway System Management

Ordering

Model	Item#	Protocol	USB	Ethernet	Description
GSM-2000-SMP	40-12 0010	BACnet IP, Modus TCP/IP	2	1	HMI / web server
AEX-SMP-BAC	40-12 0006	BACnet MS/TP RS485 – USB converter	1		Add-on accessory
AEX-SMP-MOD	40-12 0005	Modbus RTU RS485 – USB converter	1		Add on accessory

Features

- Animated graphics
- Internally maintained schedules with sunrise/sunset and stagger offsets
- Trend collection, display and export
- Runtime accumulation with email notification
- Alarm condition monitoring with email notification
- Calculated point values (average, min, max, etc.)
- Simple line programming for controlling equipment
- Database of up to 100 users and 100 user groups
- Multiple simultaneous users
- Activity log for tracking important user actions
- Template system for quickly cloning points, graphics, devices or entire networks
- Support for OEM templates that include all points, graphics, schedules, etc. for any device
- Flexible point addressing system allows access to most proprietary structures, bit fields and objects
- Calculations may be performed on data points when read and/or written (e.g. °F to °C or scaling)
- Support for custom OEM plug-in software device modules for more complex data access
- Support for up to 2,000 tree nodes which can be any combination of points, graphics, trends, etc. There are no hard limits on individual nodes. (Practical limits on control points will depend on communication speed and network bandwidth used.)

Protocols Supported

- BACnet IP & MS/TP
- Modbus RTU/485 & TCP
- Lon Works

Optional Interfaces

- CLI-FT - Lon interface (twisted pair)
- CLI-PL - Lon interface (powerline)
- CMI-485 - Modbus/485 interface (isolated)
- CBI-MSTP - BACnet MS/TP interface



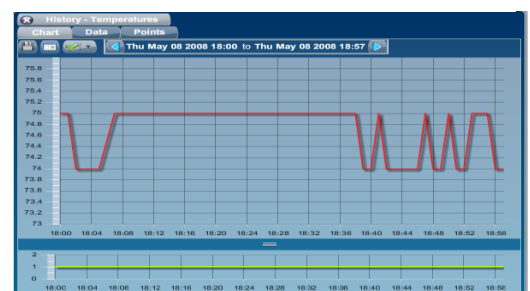
Browser-based Graphics Designer



Scheduling




Historical Trends



Technical specifications

Important notice and safety advice

This device is for use as operating controls. It is not a safety device! Where a device failure endangers human life and/or property, it is the responsibility of the client, installer and system designer to add additional safety devices to prevent a system failure caused by such a device failure. Ignoring specifications and local regulations may cause equipment damage and endangers life and property. Tampering with the device and misapplication will void warranty.

Power supply	Power requirements	5VDC 350mA
	Power consumption	Max. 2 VA
	RTC backup	Battery backed
Ports	USB	2 USB 2.0 Compatible OHCI ports
	Ethernet	1 10/100 Ethernet port
Processor	CPU	200Mhz ARM9
	RAM	64 MB SDRAM
	Flash	512 MB NAND
	Fanless	
Environment	Operation	To IEC 721-3-3
	Climatic conditions	class 3K5
	Temperature	0...50 °C (32...122 °F)
	Humidity	<85 % RH non-condensing
	Transport & storage	To IEC 721-3-2 and IEC 721-3-1
	Climatic conditions	class 3K3 and class 1K3
	Temperature	-40...70 °C (-40...158 °F)
	Humidity	<95 % RH non-condensing
Standards	Mechanical conditions	class 2M2
	 conformity	
	EMC directive	2014/30/EU
	Low voltage directive	2014/35/EU
	Product standards	
	Automatic electrical controls for household and similar use	EN 60 730 -1
	Special requirement on temperature dependent controls	EN 60 730 - 2 - 9
	Electromagnetic compatibility for industrial and domestic sector	Emissions: EN 60 730-1 Immunity: EN 60 730-1
	Degree of protection	IP00 to EN 60 529
	Pollution class	II (EN 60 730-1)
	Safety class: Local regulations must be observed!	III (IEC 60536)
General	Material	Aluminum Housing
	Dimensions (H x W x D)	125 x 80 x 28 mm (4.9 x 3.1 x 1.1 in)
	Weight (including package)	220g (7.7 oz)
Requirements	No software is required other than a web browser with the free Adobe Flash player version 9 or higher installed	
Supported browsers	Internet Explorer, Firefox (Linux and Windows), Safari Any Adobe Flash 9 compatible browser.	

Setup Instructions

Important: Avoid removing power from the GSM-2000-SMP unit without properly shutting it down by selecting "Shutdown" from the Administrator menu.

1. Connect a standard Ethernet cable from the GSM-2000-SMP unit to a hub or router on your network. Do not connect directly to your computer unless you are using a "crossover" cable as this could damage the GSM-2000-SMP Unit and/or your computer.
2. If using a LonWorks or ModBus/485 USB adapter, connect it to the lower USB port using the supplied USB cable. A second USB adapter can be plugged in to the upper USB port.
3. Plug the supplied 120 volt adapter in to a wall outlet, then in to the GSM-2000-SMP unit.
4. It could take up to 2 minutes for the GSM-2000-SMP unit to boot for the first time.
5. If your network is not set to use 192.168.0.x, you may need to temporarily set your network to use that address or use a different computer. If this is not possible, contact us for further instructions.
6. Load a web browser on your PC, and in the address bar, type "http://192.168.0.50:8651" (be sure to include the "http://") and press "Enter".
7. You should see the GSM-2000-SMP login screen. Adobe Flash 9+ is required to access the GSM-2000-SMP unit. If you do not have it installed, you may be prompted to install it.
8. If you do not see a login screen, wait 30 seconds and click the "Refresh" button in the browser. If you still do not see a login screen, check your network settings and the address in the browsers address bar.
9. Log in to the GSM-2000-SMP unit with the username of "admin" and password of "pass".
10. The default administrator password should be changed as soon as possible. Click the "Users" button on the top toolbar to access the User Database. Help is available by clicking the "?" (Help) button. Record the administrator password in a safe place. Recovering a lost administrator password is not a simple process.
11. If the IP address needs to be changed, select "Hardware Setup" from the Administrator menu, then select "Network Settings". After changing the network settings, select "Reboot" from the Administrator menu.

Once the unit is up and running at the desired IP address, click the "?" (Help) button on the top toolbar. There you will find a tutorial with instructions for quickly connecting to a network, connecting devices and creating a simple graphic.

Default Settings

IP Address: 192.168.0.50
Web server (HTTP) port: 8651
Administrator Username: admin
Administrator Password: pass
FTP Port: 8751 (FTP and Telnet are not required for normal operation)
Telnet Port: 8851
FTP/Telnet Username: GSM-2000-SMP
FTP/Telnet Password: c4tn3t