



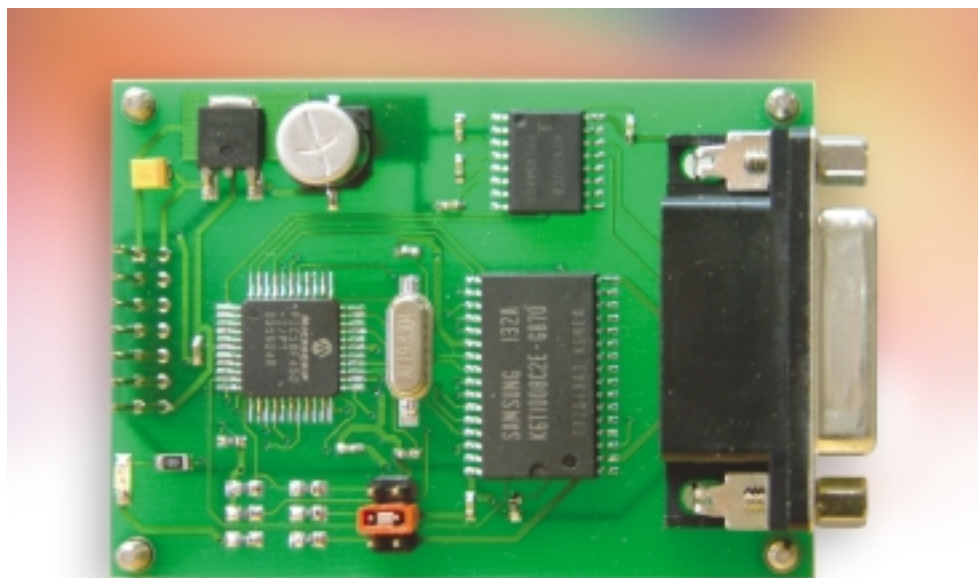
SMS Gateway Module

Remote monitoring and control via GSM mobile telephones using SMS for the PicoServ System.

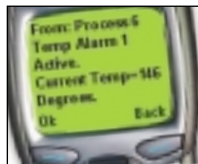
PicoServ is all about providing simple remote access.

Adding the PicoServ SMS gateway extends monitoring and control of equipment or systems connected to PicoServ to any GSM mobile phone using SMS. The PicoServ SMS gateway module is designed to interoperate with any of the PicoServ expansion modules and can be installed with or instead of the PicoServ web server module.

Connection to the GSM network is via a serial interface and the GSM 07.05 protocol, supported by many GSM handsets and GSM modems.



By extending the remote monitoring and



control possible with a PicoServ system to the mobile phone the SMS Gateway module can provide many more applications possibilities. The system can provide truly remote personal situation awareness. Almost any number of mobile users can contact and request information from a PicoServ based system and up to 16 nominated users can receive notification of events or when preset limits are reached.

With The PicoServ SMS Gateway you can use a mobile phone to:

- Receive notification of events or when preset limits are reached.
- Monitor the status of systems or equipment.
- Send control commands to remote equipment.

Input/Output

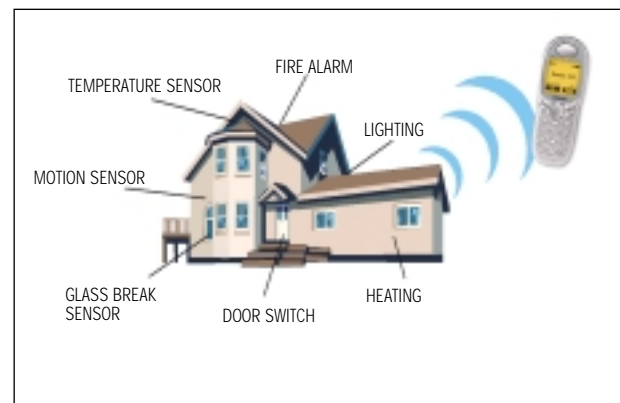
The SMS Gateway module can be used with all the standard PicoServ interface modules which simply plug into the gateway and provide a range of analogue and digital inputs and outputs.

This method provides a 'no development', real-world interface, making the input and output variables available to the user via a mobile phone.

Web Server

The SMS gateway can be used with or without the PicoServ Web Server Module. When used in conjunction with the server module a web browser interface can be provided to the SMS gateway allowing the creation of a simple web based SMS messaging centre.

Messages can be sent to any mobile number as well as providing web based SMS gateway administration.



PICO SERVO SMS Gateway Module

Connecting to the Network

The PicoServ SMS Gateway module uses an RS232 serial port and the GSM07.05 protocol standard to interface to the GSM network via a standard mobile phone or GSM modem which has a serial interface. Most GSM mobile devices with the option of a serial port support the GSM07.05 protocol. A network subscription (SIM card) is also required. The type of subscription needed will depend on the type of application, particularly the mix of outgoing and incoming SMS messages.

Specifications

Interfaces

RS232 Serial interface Used to connect the SMS Gateway module to a GSM mobile handset or modem

Format 8 data bits, no parity

Baud rates 2400, 4800, 9600, 19200, 38400, 76800, 102400bps

Connector 9 pin male 'D' type connector

I2C Serial bus interface

Used for parameter and data exchange between the SMS Gateway module and PicoServ web server or I/O modules.

Conforms to Philips I2C bus specification

Speed 750Kbps

Addresses up to 8

Connector 14 pin 0.1" male header

Protocols

GSM 07.05 Protocol for control of SMS functions within a GSM mobile telephone from a remote terminal via an asynchronous interface

Gateway Functions

Remote Parameter reading The value of any PicoServ Parameter can be requested from a GSM mobile device

Remote Parameter Setting The value of any PicoServ Parameter can be set from a GSM mobile device

Programmable Message Sending Rules Up to 16 Message sending rules can be programmed to trigger the sending of any programmed message, which can include variable data fields to any or all of 16 different GSM numbers either simultaneously or at programmed intervals

Trigger Conditions Any PicoServ system parameter specified as being =, !=, <, >, >=, <= a user programmed value

Trigger qualify time Programmable from 0-9999 seconds

Trigger re-arm time Programmable from 0-9999 minutes or re-arm from remote command

Programmable GSM

Telephone Numbers Up to 16

Programmable Number

Groups 4, with up to 16 numbers per group from number list

Programmable Messages Administration 16, 150 characters per message. Messages can include dynamic (variable) data

All functions of the SMS Gateway can be administered from a GSM mobile. Additionally if a PicoServ Web Server is installed in the system the gateway can be administered from a Web Browser or an NMS using SNMP

Password protection Yes, optional

Electrical

Power requirements 6-18 VDC, 40mA

Power consumption 280mW

Environmental

Operating Temperature 0 - +70oC

Storage Temperature -40 - +100 oC

Humidity 0-95% non-condensing

Dimensions

70mm x 50mm x 16mm (2.75" X 2" X 0.625")



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