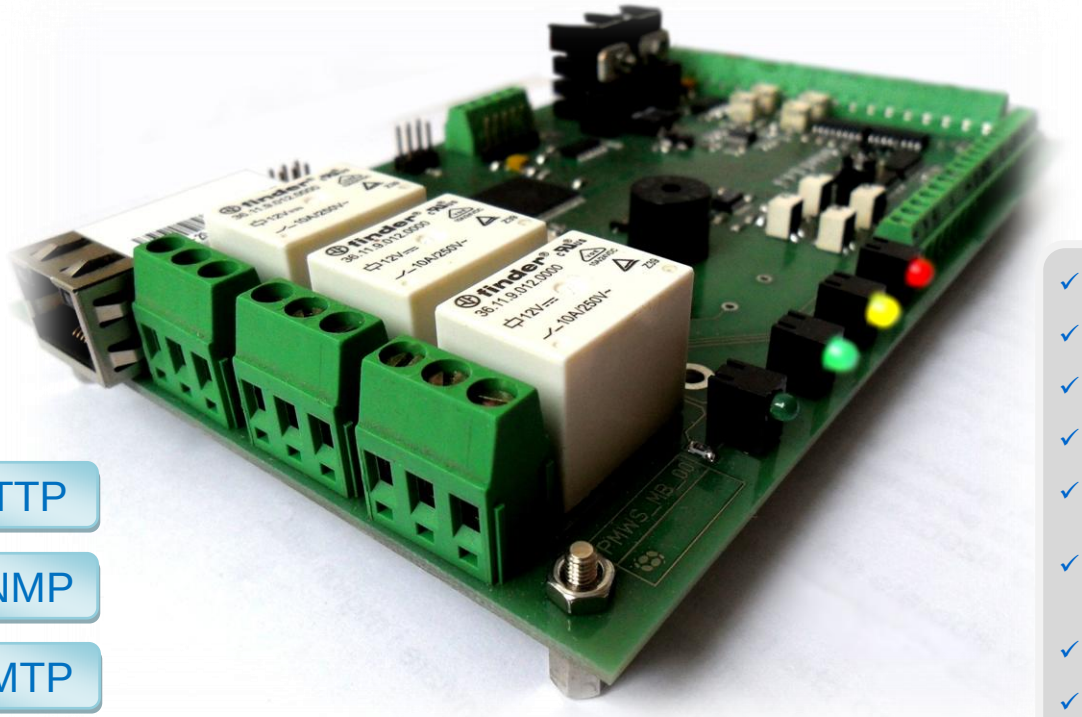
Ethernet controlled GPIO Board



HTTP

SNMP

SMTP

- ✓ 8 analog inputs
- ✓ 8 digital inputs
- ✓ 8 digital outputs
- ✓ 3 relays
- ✓ 1 temperature sensor
- ✓ 16 dip switch configurations
- ✓ 1 RS232 / RS485
- ✓ 1 clock calendar

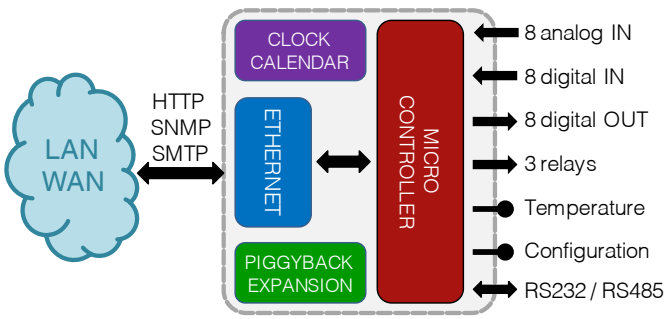
OVERVIEW

With the Ethernet controlled GPIO board you can easily control remote analog and digital devices. Thanks to the onboard Ethernet interface, it is possible to query and to set inputs and outputs through a user-friendly WEB interface or a SNMP client.

Moreover the operator can insert alarm threshold for automatic SNMP traps or e-mail to custom addresses.

ARCHITECTURE

The Ethernet controlled GPIO board is provided with 8 analog optoisolated inputs, 8 digital optoisolated inputs, 8 digital outputs, 3 relays, 1 temperature sensor, 1 dip switch for setting up to 16 configurations, 1 serial RS232 / RS485 interface, 1 chip with clock-calendar functionality and an expansion connection for several piggy-back boards.



The onboard Ethernet interface acts at the same time as a WEB Server, a Mail Server and a SNMP Server.

This interface communicates with the microcontroller unit through a serial protocol specifically developed by PM Microwave.

APPLICATIONS

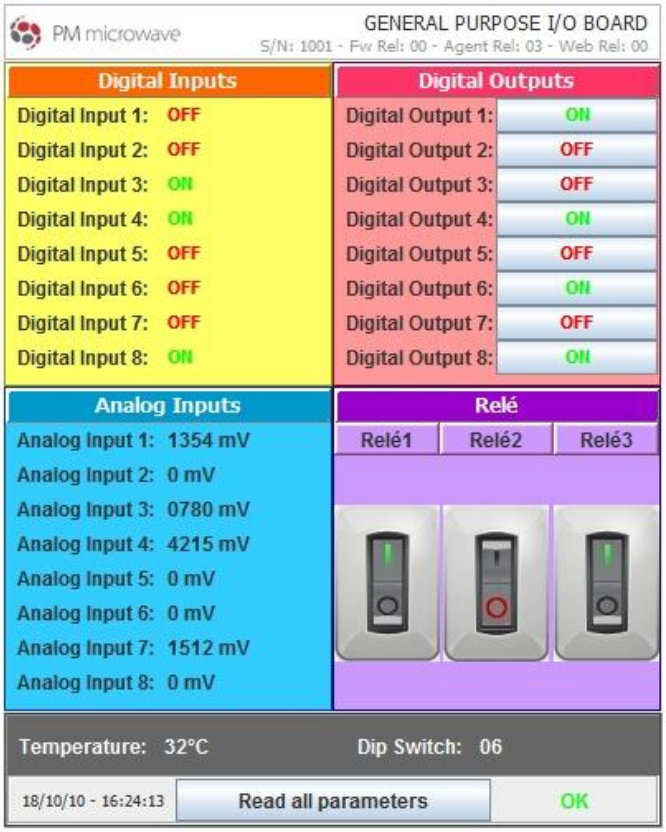
The Ethernet controlled GPIO board is typically used to remotely control one or several devices across the internet. Customers can require the board either in the simple Eurocard format, or in a properly designed aluminum case.

The Ethernet controlled GPIO board comes with a preloaded Java® based WEB interface, which permits to monitor and manage all the inputs and outputs present on the board. The same functionality can be achived via SNMP through a MIB file provided together with the board.

PM Microwave has developed a *default* WEB interface (see figure below) and MIB file which allow a quick functional integration in every work context. The alarm management is delegated to the SNMP client querying the board.

However it is possible to customize the board in order to automatically manage alarms via e-mail or SNMP traps to predefined IP addresses.

The Ethernet controlled GPIO board has an expansion connection for integrating several piggy-back boards in a modular structure. Each expansion board is dedicated to a specific functionality, for example I/O expansion board or GSM radio interface.



Default WEB Interface

TECHNICAL SPECIFICATIONS

ANALOG INPUTS	
Inputs number	8 optoisolated
Inputs dynamic	0 ÷ 10V (others on request)
Resolution	10 bit

DIGITAL INPUTS	
Inputs number	8 optoisolated
Inputs dynamic	0 ÷ 5V (others on request)

DIGITAL OUTPUTS	
Outputs number	8
Output levels	0 ÷ 5V (others on request)

RELAYS	
Relays number	3
Maximum voltage	250 V
Maximum current	10 A

COMMUNICATION INTERFACES	
Ethernet	100baseT
Supported protocols	HTTP, SNMP, SMTP, TCP, UDP, IP
Serial interface	RS232 / RS485

GENERAL	
Power supply	12 ÷ 15 Vdc (PoE on request)
Power consumption	10 W max
Operating temperature	-10 ÷ +55 °C
Storage temperature	-20 ÷ +80 °C
Storage relative humidity	10% ÷ 80%
Operating pressure	86 ÷ 106 kPa (860 ÷ 1060 mbar)
Altitude	up to 3000 m
Dimensions	100 × 160 × 30 mm

ORDERING INFORMATION

ETH-GPIO	**Ethernet controlled General Purpose I/O Board**

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