

ETHM-1 Plus

ETHERNET COMMUNICATION MODULE

ethm1_plus_sii_en 07/18

Quick installation guide

Full manual is available on www.satel.eu

The ETHM-1 Plus module enables the INTEGRA Plus, INTEGRA and VERSA alarm control panels to communicate via the Ethernet network.



You can connect the INT-GSM module to the ETHM-1 Plus module. This will allow GPRS to be used as a backup communication path and enable dual path reporting. The INT-GSM module is supported by the INTEGRA / INTEGRA Plus alarm control panels with firmware version 1.18 or newer. The required version of ETHM-1 Plus module firmware: 2.05 or newer.

1. Electronics Board

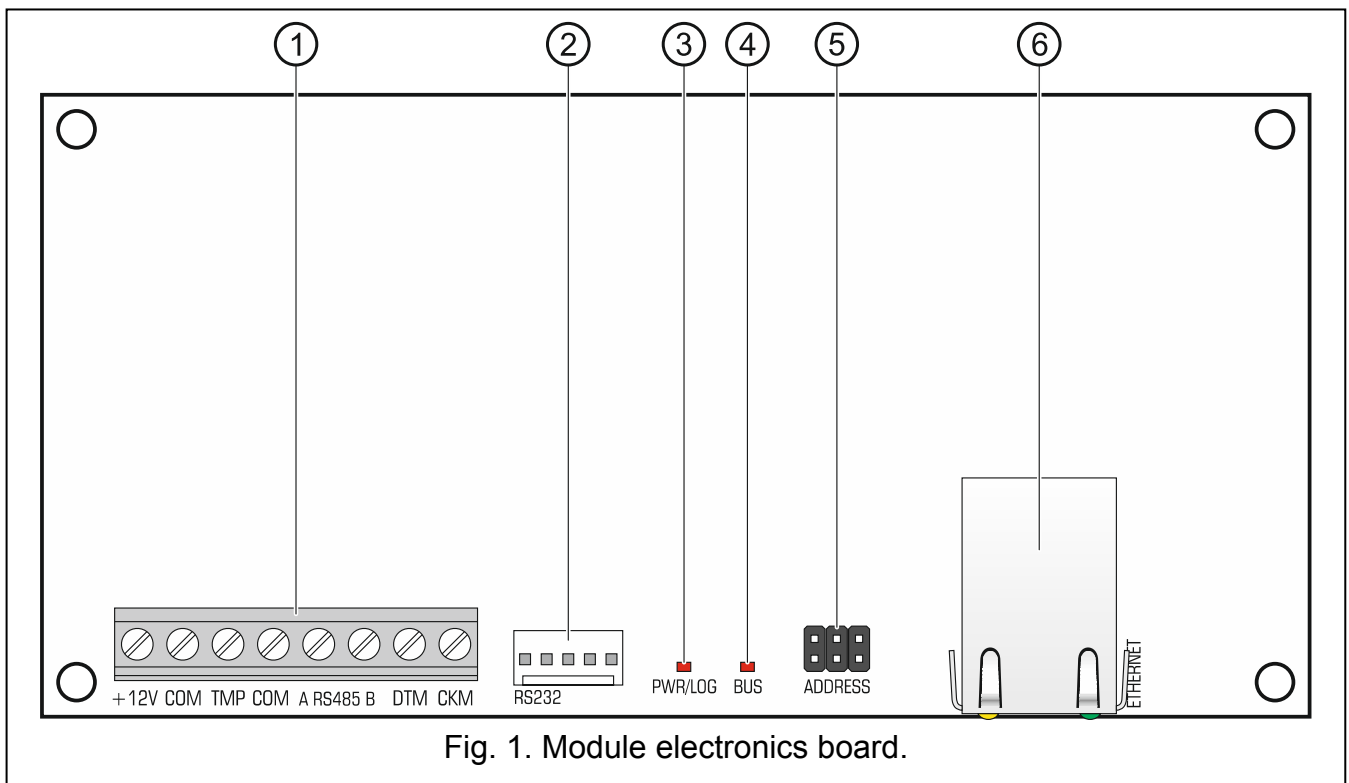


Fig. 1. Module electronics board.

① terminals:

- +12V** - +12 V DC power input.
- COM** - common ground.
- TMP** - tamper input (NC) – if not used, it should be shorted to common ground.

A RS485 B - RS-485 port for connecting INT-GSM module. The INTG-GSM module is supported if the ETHM-1 Plus module is connected to the INTEGRA Plus / INTEGRA control panel with firmware version 1.18 or newer.

DTM - data (communication bus).

CKM - clock (communication bus).

② RS-232 port.

③ PWR/LOG LED:

OK – power OK,

blinking – control panel being programmed or operated by means of the module.

④ BUS LED – blinking LED indicates that data exchange with the control panel is in progress.

⑤ pins for setting the module address (see “Setting address”).

⑥ RJ-45 connector for Ethernet network. It is provided with two LEDs:

green – indicates connection to the network and data transmission,

yellow – indicates negotiated transmission rate (ON: 100 Mb; OFF: 10 Mb).

2. Setting address

To set an address, you must place jumpers across the ADDRESS pins. Table 1 shows how to use jumpers in order to set a specific address (■ - jumper on; □ - jumper off).

Address	0	1	2	3	4	5	6	7
Pins status	□ □ □ □	■ □ □ □	□ ■ □ □	■ ■ □ □	□ □ ■ □	■ □ ■ □	□ ■ ■ □	■ ■ ■ □

Table 1.

2.1 Module connected to INTEGRA / INTEGRA Plus control panel

Set an address in the module within the range:

- from 0 to 3, if it is connected to INTEGRA 24 or INTEGRA 32 control panel,
- from 0 to 7, if it is connected to another INTEGRA or INTEGRA Plus control panel.

The address set must be different from that in the other devices connected to the keypad bus of the control panel (the control panel does not support devices with the same address).

2.2 Module connected to VERSA control panel

Set address 4 in the module. No keypad with the address 4 may be connected to the control panel.

3. Installation



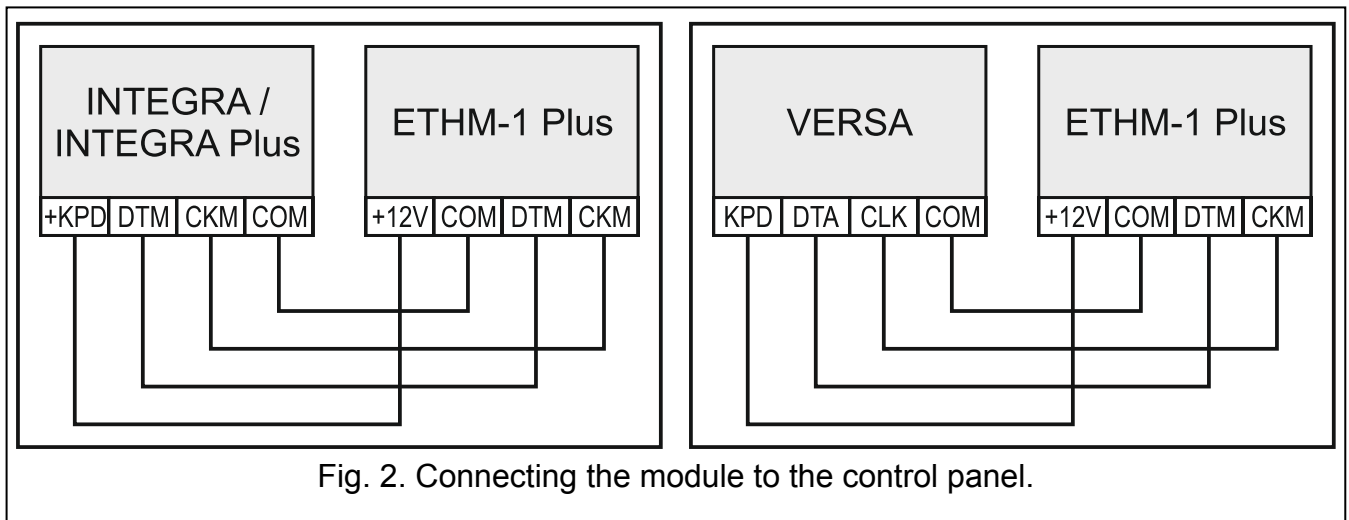
The alarm system should be installed by qualified personnel.

Disconnect power before making any electrical connections.

The device is designed to be used only in the local area networks (LAN). It must not be connected directly to the public computer network (MAN, WAN). For establishing connection with public networks, use a router or xDSL modem.

The device is designed for installation indoors, in spaces with normal air humidity.

1. Secure the module electronics board in the enclosure. The module should be installed in the same enclosure as the control panel. This will facilitate connecting the RS-232 ports of control panel and module, which is required, if the control panel is to be configured via Ethernet using the DLOADX program.
2. Set the module address (see "Setting address").
3. Connect the +12V, COM, DTM and CKM module terminals to the control panel terminals (Fig. 2). It is recommended that an unshielded non-twisted cable be used for making the connection. If you use the twisted-pair type of cable, remember that CKM (clock) and DTM (data) signals must not be sent through one twisted-pair cable. The wires must be run in one cable.



4. If the module is to supervise the enclosure tamper switch, connect the tamper switch wires to the TMP and COM terminals. Otherwise, connect the TMP terminal to the module COM terminal.
5. Connect the module to the Ethernet network. Use a cable compliant with the 100Base-TX standard (identical as for connecting the computer to the network).
6. Power on the alarm system.
7. Start the identification function in the control panel (see the control panel installer manual). The module will be identified as "ETHM-1" or "ETHM+GSM" (if the INT-GSM module is connected to the RS-485 port).
8. Configure the module (see full manual).
9. If the control panel is to be configured via the module using the DLOADX program, connect the module RS-232 port to the control panel RS-232 port. Depending on the control panel, use the following cable to make the connection:
 - INTEGRA with connector socket of PIN5 type: **PIN5/PIN5** (Fig. 3)
 - INTEGRA with connector socket of RJ / INTEGRA Plus type: **RJ/PIN5** (Fig. 4)
 - VERSA: **PIN5/RJ-TTL**
 The above mentioned cables are available in SATEL's product offering.

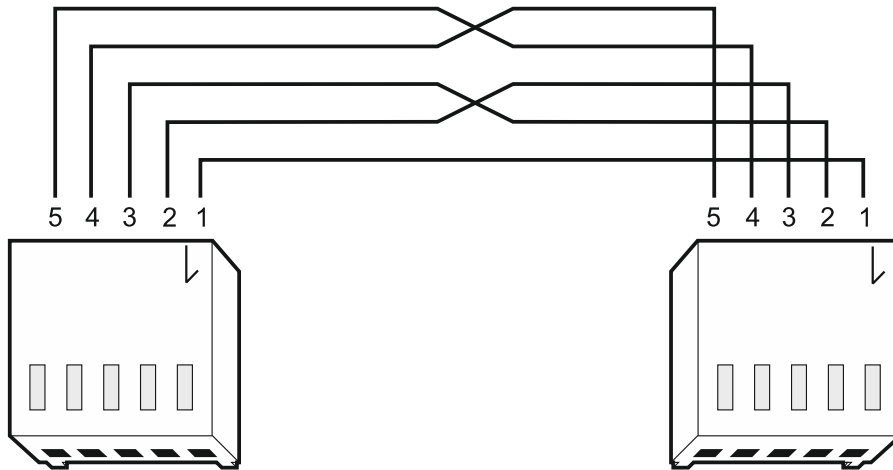


Fig. 3. Wiring diagram of the cable connecting RS-232 ports of ETHM-1 Plus module and INTEGRA control panel with PIN5 connector socket.

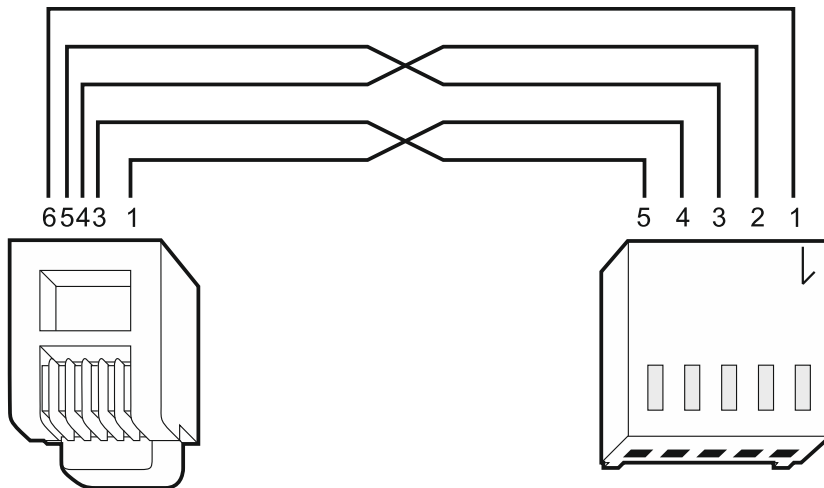


Fig. 4. Wiring diagram of the cable connecting RS-232 ports of ETHM-1 Plus module and INTEGRA / INTEGRA Plus control panel with RJ type connector socket.

The declaration of conformity may be consulted at www.satel.eu/ce