

## Instruction Manual

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# HI 504900 GSM Module

Dear Customer,  
Thank you for choosing a Hanna Instruments product.  
This manual will provide you with the necessary information for correct operation. Please read it carefully before using the instrument.  
If you need additional technical information, do not hesitate to e-mail us at [tech@hannainst.com](mailto:tech@hannainst.com).  
This instrument is in compliance with the **CE** directives.

### PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipping. If there is any damage, notify your Dealer.

Each unit is supplied complete with:

- 12 VDC power adapter
- Instruction Manual

**Note:** Save all packing material until you are sure that the instrument functions correctly. All defective items must be returned in their original packaging together with the supplied accessories.

### WARRANTY

**This product is warranted for two years** against defects in workmanship and materials when used for their intended purpose and maintained according to instructions.

This warranty is limited to repair or replacement free of charge.

Damages due to accidents, misuse, tampering or lack of prescribed maintenance are not covered. If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization number from the Customer Service department and then send it with shipping costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

### TECHNICAL DATA

- **DATA, SMS service**
- **Remote control by AT commands (according to GSM 07.07 and 07.05)**
- **Max output power:** 2 W for EGSM900; 1 W for GSM1800/1900
- **SIM interface:** 3V type SIM card
- **Antenna:** Dual-band antenna (900/1800/1900 MHz)
- **Input voltage:** 12 VDC

**Note:** For interference immunity the connecting power cable must not exceed 1.8 m in length

- **Overall dimensions:** 200 x 154 x 79 mm (7.9 x 6.1 x 3.1")
- **Weight:** approx. 750 g (1.65 lb.)

Two models are available:

- **HI 504900-1:** Dual-band 900/1900 MHz GSM  
Power supply: 12VDC to 115VAC power adapter
- **HI 504900-2:** Dual-band 900/1800 MHz GSM  
Power supply: 12VDC to 230VAC power adapter

### MAINTENANCE & SAFETY TIPS

- SIM card: do not bend or scratch the SIM card or expose it to static electricity.
- Wipe the module housing with a moist or antistatic cloth. Do not use a chemical cleaning agent.
- Do not expose the GSM module to any extreme environment where the temperature or humidity is high.
- Do not attempt to disassemble the unit. There are no user serviceable parts inside.

## SAFETY INFORMATION

Radio devices have limitations in the vicinity of electronic devices.



- Unplug the unit in hospitals or near medical devices like pacemakers or hearing aids. The module may interfere with the operation of these devices.



- Unplug the unit when flying. Secure is so that it can not be powered inadvertently.



- Unplug the unit near petrol stations, fuel depots, chemical plants or blasting operations. The module can disturb the operation of technical equipment.



- Interference can occur if the device is used near televisions, radios or PCs.

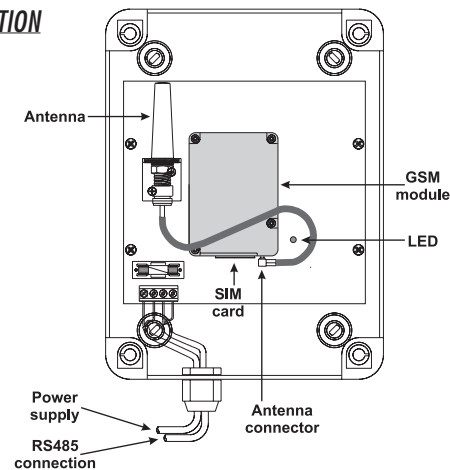
- In order to avoid possible damage, it is recommended to use only the Hanna Instruments accessories. They have been tested and shown to work well with this device. However, accessories are not covered by the warranty.

IMEI number.

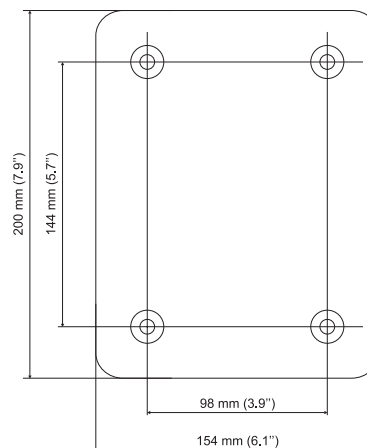
Stick here the IMEI number label or write it down for your future reference.

ISTR504900 05/03

## FUNCTIONAL DESCRIPTION

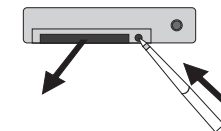


## BOTTOM VIEW



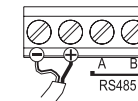
## OPERATIONAL GUIDE

- For SMS messages sending, use a SIM card able to make voice calls. For modem connections, the SIM card must be able to receive data calls.
- For inserting the SIM card, operate the eject pin next to the card holder by pressing it for example with a pen. The card holder comes out.
- Insert the SIM card in the holder and push it back into the housing.



**Note:** Before inserting (or extracting) the SIM card, make sure there is no voltage applied to the GSM module.

- Connect the RS485 interface cable to A and B terminals.
- Connect the supplied power adapter wires to the proper terminals as follow:  
black & white wire to the negative pin (-);  
black wire to the positive pin (+).
- Power the unit through the 12 VDC adapter.
- The LED displays the operating status of the GSM module:



LED	GSM Module status	
OFF	Switched OFF	
ON	Permanent	Switched ON, not registered on network
	Slow flashing	Switched ON, registered on network
	Quick flashing	Switched ON, registered on network in ongoing call mode

**Note:** The module should be installed and set up only by qualified personnel.