ATT-81

GSM/GPRS REMOTE MONITOR

SAFETY INFORMATION

Do not install this unit near medical devices like pacemakers or hearing aids. This unit may interfere with the operation of these devices.

Do not switch off this unit when flying. Secure it so that it cannot be switched on inadvertently.

Do not install this unit near petrol stations, fuel depots, chemical plants or blasting operations when this unit can disturb the operation of technical equipment.

In order to prevent danger to life or property, it is the responsibility of the system designer to incorporate redundant protective mechanism appropriate to the risk involved.

All units are 100% functionally tested. Specifications are based on characterisation independent. Power supply connection on terminal 1 and 2, bottom left side. The power supply unit must meet the demands placed on SELV [1] circuits in the housing. The contacts are suitable for use in domestic and industrial environments.

PRODUCT DESCRIPTION

The ATT-81 is an industrial DIN rail GSM modem for the supervision and control of remote inputs and outputs by means of enhanced features available through GSM network. Industrial standard interface and an integrated SIM card reader mean it can be used rapidly, easily and uniformly to quickly implement new applications in telemetry, telemedicine and remote control. All interfaces and connections are in the housing. The connections are suitable for use in domestic and industrial environments.

CARE AND MAINTENANCE

Your ATT-81 is the product of advanced engineering, design and craftsmanship and should be treated with care. The suggestion below will help you to enjoy this product for many years.

- Do not expose the unit to any extreme environment where the temperature or humidity are out of operating range.
- Do not use or store the unit in dusty or dirty areas. Its moving parts (SIM holder for example) can be damaged. There are no user serviceable parts inside.
- Do not open the unit to water, rain or splatters. It is not waterproof. Rough handling can damage it.
- Do not place the unit alongside computer discs, credit or travel cards or other magnetic media. The information contained on these devices may be affected.
- Do not modify the configuration by means of GsmSuite, either in local or remote mode it will be possible to change:
  - Module switched ON
  - Not registered on the network
  - Communication in progress

NOTE

All items of the evolution of standards and products, the company reserves to modify in every time the feature of the product described in this instruction manual, without any prior notice.

The liability of the product for damage caused by defect of the product "can be reduced or deleted (...) when the damage is caused joint by a defect of product or failure of the damaged or a person of which the damaged is responsible" (Article 6, 807/93/CED).

POWER SUPPLY

Dual band EGSM900 and GSM1800 for data, sms, fax and voice applications. Full Type Approved and compliant with ETSI GSM Phase 2+

Features:
- Power input: 2 x 2.5W (AWG14)
- Input and output terminals 12 x 2.5mm (AWG14)
- Input red led status indicators
- Output green led status indicator

DIMENSIONS [mm]

PRODUCT FEATURES

Class 4 (1W @ 900 MHz)

Temperature:
- storage and transport: -30 to 85°C
- operating: -20 to 55°C

Relative humidity:
- operating: 5% to 95% non-condensing storage & transport 5 to 95% condensation allowed outside

Enclosure:
- EN-50022 rail 4 modules, polycarbonate, UL94 -V0

Overall dimensions:
- mm 71 x 50 x 98 (W x H x D)

Weight:
- 200 g

Degree of protection: IP-40 (EN-60529 / IEC 529) properly fitted

INPUTS / OUTPUTS

Eight digital inputs coming from SPST contacts can be wired to terminals 7-14. Common return for contacts at terminal 6. Using electronic switches, terminal 6 is the positive leg. In order to avoid false triggering, contacts will be considered closed or open after 3 seconds from stable condition.

Modification of the configuration by means of GsmSuite, either in local or remote mode it will be possible to change:
- Debounce time from 1 to 99 seconds.
- Enable and disable input opening detection.
- Enable and disable input opening detection.

NOTE

ATT-81 with embedded antenna

The embedded antenna is located under the front panel. This omnidirectional antenna can work properly if the front side of the device is not shielded by metallic frames (i.e.: the GsmControl+A is installed inside a metal cabinet).

ATT-81 with external antenna

An antenna for use with this unit must be connected to the RF interface, implemented as a 50 FME male coaxial jack at the end of a short RG174 cable stub exiting from the top side of the device. The antenna must fulfill the requirements given below:

<table>
<thead>
<tr>
<th>Power supply</th>
<th>Power supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Module switched ON</td>
</tr>
<tr>
<td>OFF</td>
<td>Not registered on the network, missing SIM or invalid PIN</td>
</tr>
<tr>
<td>SLOW FLASH</td>
<td>200ms ON / 600ms OFF</td>
</tr>
<tr>
<td>QUICK FLASH</td>
<td>200ms ON / 600ms OFF</td>
</tr>
</tbody>
</table>

STANDARDS

- EN 60529 / IEC 529 (IP 40)
- UL94 -V0
- Weight: 200 g

We recommend a VSWR max. of 1.5:1 although a VSWR max of 2:1 can be accepted without affecting performance and certification.

The DC impedance is floating but there is no problem when using antennas that present a short grounding.
**SIM CARD**

The SIM card receptacle is intended for SIM cards ([GSM 11.12 phase 2+]). The SIM card must be inserted in the cardholder to put the unit into operation. Make sure that there is no voltage applied to the unit. Do not disconnect also the backup battery, if any. Following the figure below:

1. Unlock the top cover using a small screwdriver.
2. Slide up to release the front cover.
3. Insert the SIM card in the receptacle, contacts must be on the bottom side.

The newer NiMH batteries are less harmful to the environment, have a longer life, and contain recyclable materials. Recycling options available in your local area should be considered when disposing of this product. Do not dispose of in fire.

**ACCES INSIDE**

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**ACCESS INSIDE**

Serial communication port and backup battery are located inside the unit.

Before opening the unit disconnect power supply and all live circuits that may be accessible.

The front cover must be removed to access the inside of the unit:

1. Push with two fingers on top and bottom sides of front cover to release it.
2. Put the front cover and keep it in a safe place.

**COM PORT**

Operating without SIM PIN

The simplest way is to put your SIM card into a cellular phone and program it so it won't ask for the PIN. The SIM card is 'locked' and someone could insert the SIM card, use it and read the information inside.

Enter default SIM PIN

GsmControl+ comes with a default PIN: 0000 (four zeros). Put your SIM card into a cellular phone and program the PUK using the given number.

**WARNING**

If you enter a SIM card 3 digits is asked for a PIN number different from that stored into ATT-81, the unit will not operate. If you enter the PINS 3 times incorrectly, SIM card will lock up and you must provide the PUK (PIN Unlocking Key).

**QUICK START**

Add Recipients (group 9)

Alerts following local events can be issued to Recipients (upto 100).

Recipients stored in the internal memory of ATT-81 can be modified using ATT-Tool with local link or by means of SMS issued by supervisors.

**FEATURES ARE AVAILABLE THROUGH SERIAL COMMUNICATION LINK**

To identify your device more easily, you can store some specific information. A supervisor can issue the following SMS:

1. GsmSuite+ comes with a default PIN = (four zeroes).


**EVENTS SPECIFIC**

Blackout

Input 1 closingInput 2 closingInput 3 closingInput 4 closingInput 5 closingInput 6 closingInput 7 closingInput 8 closing

Power good

Input 1 openingInput 2 openingInput 3 openingInput 4 openingInput 5 openingInput 6 openingInput 7 openingInput 8 opening

Device info

Input 1 openingInput 2 openingInput 3 openingInput 4 openingInput 5 openingInput 6 openingInput 7 openingInput 8 opening

SMS event

Input 1 openingInput 2 openingInput 3 openingInput 4 openingInput 5 openingInput 6 openingInput 7 openingInput 8 opening

Event message

Input 1 openingInput 2 openingInput 3 openingInput 4 openingInput 5 openingInput 6 openingInput 7 openingInput 8 opening

**DEVICE INFO**

To view device information of ATT-81 when the unit is ready to operate.

1. GsmSuite+ comes with a default PIN: 0000 (four zeros). Use the default PIN to unlock the unit.

2. Pull the front cover and remove it.

**FREE CLIP CONTROL**

Registered users can control outputs by means of simple (free) calls. Supervisors can set different activation times and outputs behavioural issuing an SMS.

**PULSE (default)**

Selecting this mode, incoming voice (or fax) call from registered user will turn on the output for the time set in pulse.

**TOGGLE**

Incoming voice (or fax) call will toggle the output on or off, or vice-versa.

A ringback will be issued only when an output is turned off.

Notes:

- Clip feature is disabled, nothing happens on incoming calls from registered users.

- Pulse (default)

- Toggle

- None

**SYSTEM COMMANDS**

Special control SMS are reserved for supervisors only:

- Stop
- Start
- Disable

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