CONTA-ELECTRONICS

GSM controllable I/O module

CONTACLIP

GSM-PRO

Electrical specifications

Order Information	
type	GSM-PRO
Cat. no.	16099.2
Weight	275gr
Input / Output Data	* of measured value
8 multifunctional analog / dig. inputs	010V / 24VDC (430VDC)
resolution / accuracy (010V)	20mV / ±(20mV+0,3%*)
input resistance (010V)	46kOhm
input current digital inputs (typ.)	@10V: 0,3mA / @24V: 0,8mA / @30V: 1,0mA
Ul minimal pulse length	800ms (while not transmitting)
input threshold digital Inputs	Low < 2V / High > 4V
4 relay outputs	4 x CO Contact, 250 V ~
rated / inrush current (Ohmic load)	5A / 5 A
max. power rating	1200VA at 240V AC, 5A
life span @ Ohmic load	Electrical: at max. load: > 1,5 x 10 ⁵ cycles. Mechanical: 15 x 10 ⁶ cycles
max. switching frequency	6 min ⁻¹ at rated current, 1200 min ⁻¹ at no load
contact material / test voltage	AgNi / 4kV
GSM Data	
Frequency	850/900/1800/1900 MHz
Sensitivity	-108 dBm @ 850/900MHz / -107dBm @ 1800/1900MHz (typical)
Transmit power	Class 4 (2W@850/900 MHz), Class 1 (1W@1800/1900 MHz)
Antenna	50 Ohm impedance, SMA connector
General Data	
module power supply	1030V DC
module current (max)	275 mA DC @ 24V DC
Reference out	4,7V ±10% / 20mA
Power Backup	Internal maintenance free supercap
operating / storage temperature	-20°C+50°C / -20°C+70°C
Max. relative humidity	80%, non condensing
CE marking	Low Voltage Directive (LVD) 2006/95/EC, according requirements of EN 50178
	EMC Directive 2004/108/EC, according requirements of EN 55011 and EN 61326-1
	R&TTE 1999/5/EC according requirements ETSI EN 301-511 V9.0.2
conductor cross section / strip length	0,2 - 2,5 mm ² screw clamp connection / 6mm
mounting / installation position	DIN-rail TS35 or direct mounting / any
module size LxWxH (TS 35 / direct)	88 x 95 x 60 / 58 mm (without antenna)
insulating material / flammability class	Housing: noryl. Terminals: polyamid 6.6 V0 / UL94-V0
protection degree (DIN 40050)	IP 20
installation guidelines	for mounting-, wiring- and installation instructions, see Manual
Accessories	
GSM antenna	GSM-antenna
Cat.no.	16101.2
	CSMtt SMA 3 5
GSM external antenna	GSM-antenna-external-SMA-2,5m
GSM external antenna Cat.no.	16061.2

Quick Start Guide



The GSM-PRO is a compact remote telemetry and control system.

The various I/Os are monitored and controlled by SMS / Email communication through the GSM network.

Every defined input status change (digital) or reached level (analog) sends a SMS / E-mail notification to a selected group of users. The outputs are set by simply sending an SMS to the GSM-PRO.

I/Os are defined by an easy to use PC configuration program.

Features:

- 8 multi-functional analog/digital inputs: 0..10V, 24VDC
- 4 relay outputs CO contact 250V/5A
- LED status indication for all I/Os
- SMS / E-mail status report for all I/Os
- · SMS control for all outputs
- SMS / E-mail notification on status change at inputs
- · SMS notification on power loss
- SMS / E-mail notification on power up
- Easy to use PC configuration program

GSM-PRO quick start guide rev1 _EN.doc

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Note

This document is a quick start guide. For further details the complete manual can be downloaded at:

http://www.conta-clip.com/en/service/

Placing the SIM card



KEEP ESD PRECAUTIONS IN MIND WHEN OPENING THE MODULE!

To open the module lift the lid with a small flat screwdriver.

Place a SIM card into the SIM card holder inside the module. When a SIM card with PIN code is inserted the PIN code must be entered in the configuration interface.

Replace the lid and connect the antenna.

Connect the module to the 24VDC power supply. After 10 seconds the first LED's activate.

After 90 seconds the 'RUN' LED should stop blinking the module is now ready for use.

Configure and connecting the module

Download and install the configuration interface: http://www.conta-clip.com/en/service/

Connect the module with a USB cable to the PC.

Start the configuration program and it will connect to the module. The module is now ready for configuration.

The wiring configuration for I/O and power is shown at the top of the module.

Led status

The Led 'Run' indicates module activity: Flash = starting up
ON = ready for use

The Led 'Com' indicates network activity: green ON = connected to GSM network

green Flash = roaming GSM network

green OFF = not connected to GSM network

red ON = error

The Led 'Busy' indicates modem activity: ON = module currently busy

Default message structure

n = channel number

x = digital: 0= off, 1= on, 2= don't change, 3= toggle

Get status of ALL IOs: SMS: F

SMS: RALL
Answer: 'read: DO1=x, DO2=x, DO3=x, DO4=x'

'UI1=xxx, UI2=xxx, UI8=xxx'

(Digital Outputs)

Write multiple DOs: SMS: WMDOxxxx

Answer: 'status DO1=x, DO2=x, DO3=x, DO4=x'

Write single DO: SMS: WDOnx

Answer: 'status DOn=x'

Read multiple DOs: SMS: RMDO

Answer: 'read DO1=x, DO2=x, DO3=x, DO4=x'

Read single DO: SMS: RDOn

Answer: 'read DOn=x'

(Universal Inputs)
Read multiple Uls:

Uls: SMS: RMUI

Answer (digital): 'read UI1=x, UI2=x, UI8=x'

(analog): 'read UI1=xxxx, UI2=xxxx, UI8=xxxx'

Read single UI: SMS: RUIn

Answer (digital): 'read Uln=x'

(analog): 'read Uln=xxxx'

Module Reset: SMS: WRESET

Answer: Powercycle message

NOTE: DOn /Uln can be replaced by a user given name with the configuration interface. NOTE: Correct sending and receiving of data depends on the network quality of your provider.