

**D** Bedienungsanleitung

**GB** Operating instruction

## IE-GPRS-IO

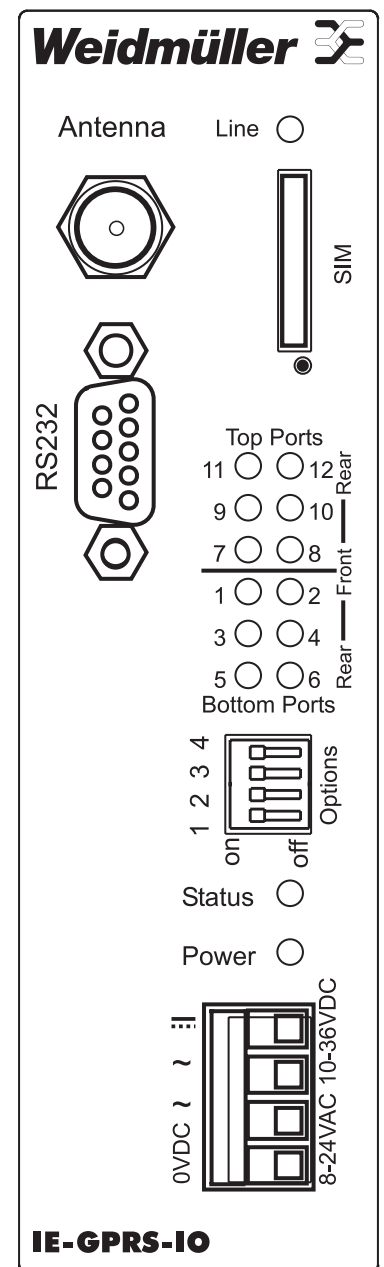
IE-GPRS-IO

8850060000



Industrial Control Equipment  
4EA4  
For Use In Class 2 Circuits

Made in Germany



# Operating Instruction

The IE-GPRS-IO Alarm Modem is suitable for use in applications requiring signals to be activated via relay contacts, limit values to be monitored in analogue mode or where higher-level systems are to receive data per serial protocol.

A virtual dedicated line can be configured via GPRS. Thus point-to-point, multipoint, multidrop topologies can be created extremely economically and with optimum functionality.

'Transparent RS-232 data transmission via GPRS'

The IE-GPRS-IO is designed to transmit the widely varying status signals generated from within a facility, the begin or end of a control procedure or alarm signals as well as other information as required.

That means the IE-GPRS-IO can be integrated into legacy installations.

The devices are equipped with 1 serial interface and 2 x 4 digital inputs, 2 x 2 digital outputs as well as 2 x 2 analogue inputs.

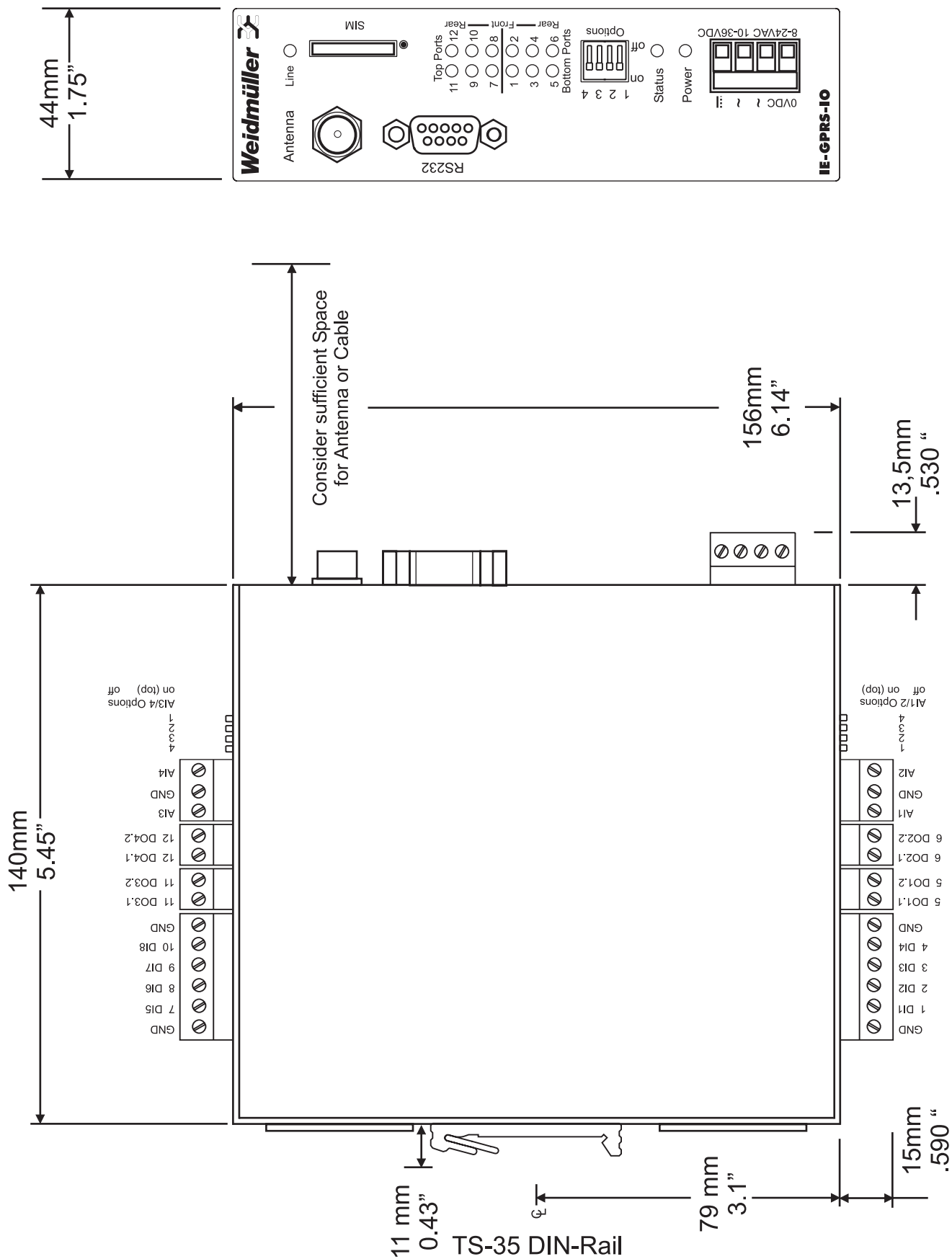
The top-hat style housing contains the microcontroller for acquiring system statuses and storing the message texts. In accordance with the integrated layer plan function, messages are issued to up to 8 target numbers per signal input. The operating or bias current principle can be selected.

The device is fitted with LEDs for diagnostics and status indication. The device can send messages as sms, acknowledgement, fax, e-mail, pager or direct call.

## Technical Details

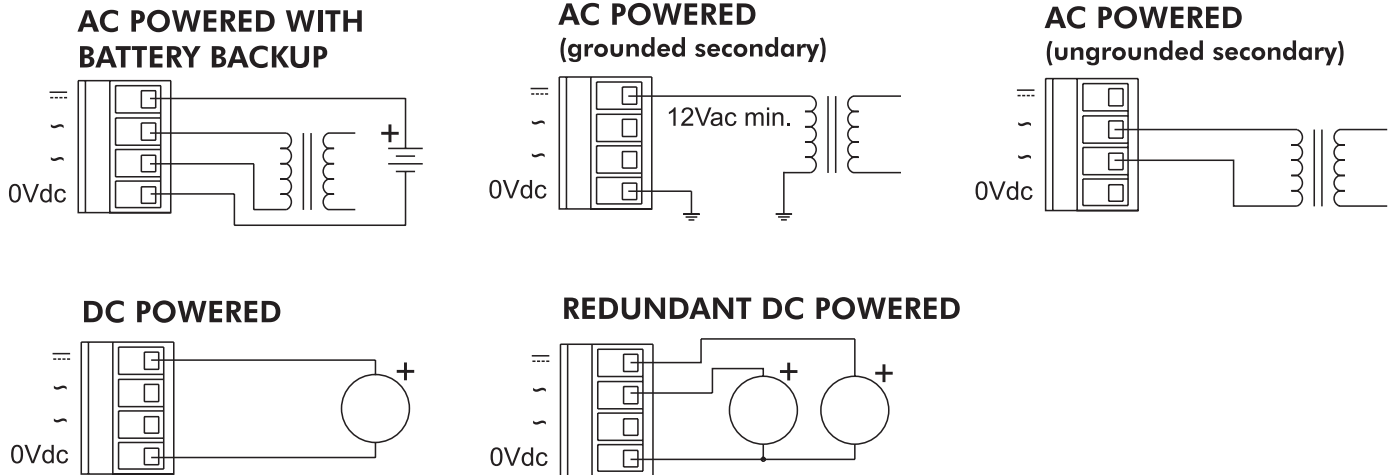
Transmission modes	Asynchronous, full/half duplex or simplex
Transmission medium	Dual Band GSM/GPRS Modem EGSM 900 / 1800 MHz
Serial interface	EIA RS-232-C/CCITT V.24 9 pole SUB-D-socket
Transmission speeds	up to 38,4 kbit/s (RS-232) up to 53,6 kbit/s Vodafone GPRS
Ambient temperature	-20° - 55° C
Humidity	0-95%, non-condensing
Dimensions	156 x 44 x 140 mm (H x W x D)
Installation	on 35 mm DIN-rails
Power supply	12/ 24 V DC
Fusing	400 mA
Power input	5 W when transmitting
Digital inputs	2 x 4 12/24 V DC
Digital outputs	2 x 2 12/24 V DC
Analog inputs	2 x 2 0-10 V/ 0-20 mA/ PT1000

# Dimensional Drawing



# Power Supply

The IE-GPRS-IO can be supplied with either 10 to 36 V DC or 8 to 24 V AC. Power input is approx. 10 W.



## Electrical voltage

Connection to the electrical supply system must be carried out by a qualified electrician.

Power must be supplied via a power supply unit in accordance with DIN EN 60 742 (VDE 0551)

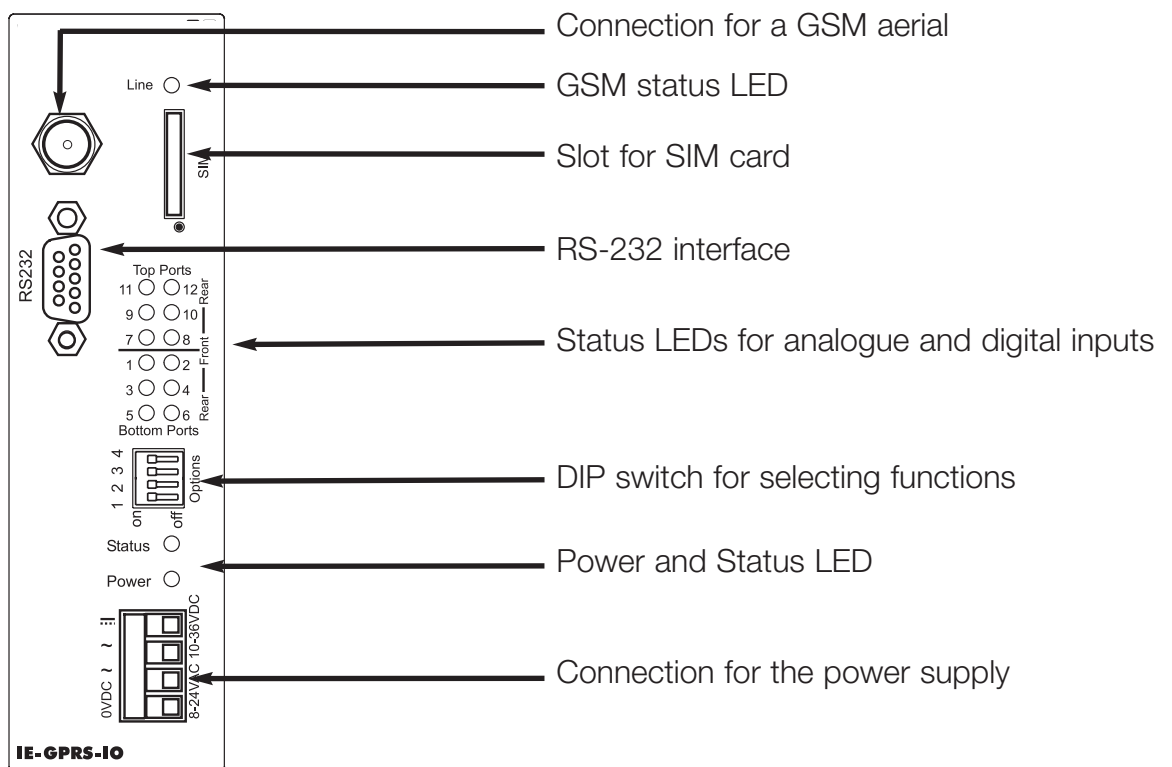
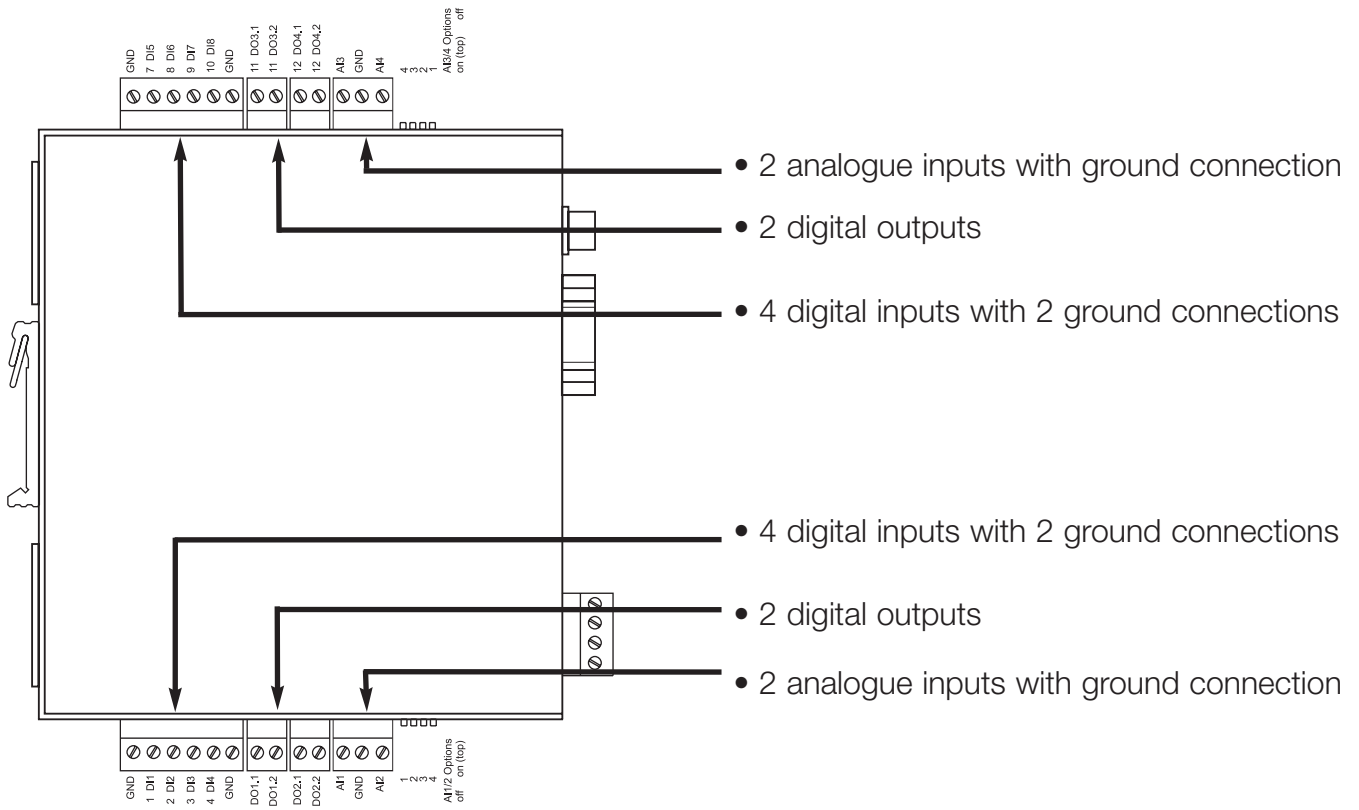
The mains supply side must be fused.

Use only the cables supplied to connect up the device.

On the bottom rear end a connection to functional earth is recommended.

This connection is recommended by a 4 mm<sup>2</sup> cable with a 6.3 female spade terminal, the IE-GPRS-IO has the male spade terminal.

# Connections/ Interfaces



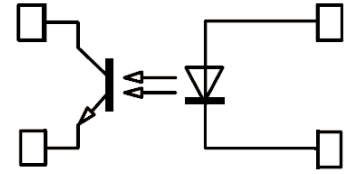
# Digital inputs and outputs

## Input

Input voltage 0 to 30 V DC

Input voltage status 0      0 to 6 V / 0 to 1.2 mA  
 Input voltage status 1      10 to 30 V / 1.5 to 4.5 mA

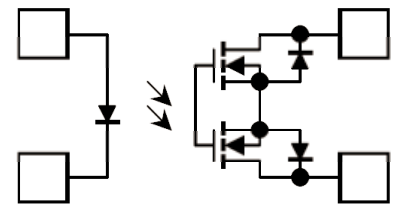
Equivalent circuit for digital inputs:



## Output

Operating voltage 10 to 30 V DC  
 Output current Max. 400 mA

Equivalent circuit for digital outputs:



Take external measures to guarantee short-circuit and overload protection of the outputs.

# Analogue Inputs

The IE-GPRS-IO is equipped with 2 x 2 analogue inputs that can be used to measure voltage, temperature or current as required.

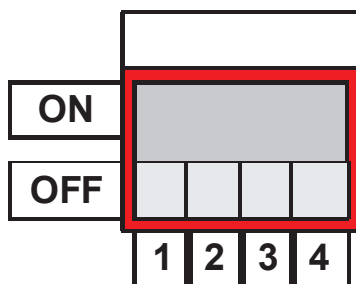
Measured quantity	Range	Remark
Voltage (factory setting)	0 to 10 V (max. 30 V)	Input impedance 180 KOhm
Temperature	PT 1000	
Current	0 to 20mA (max. 100mA)	Input impedance 100 Ohm

# Serial Interface

Interface assignment

	COM 1	
RS 232	1	DCD Received Line Signal Data Carrier Detect
	2	RxD Received Data
	3	TxD Transmitted Data
	4	DTR Data Terminal Ready
	5	GND Signal Ground/Common Return
	6	DSR Data Set Ready
	7	RTS Request to Send
	8	CTS Clear to Send
	9	RING Ring Indicator

## DIP Switch - front side



DIP switch

Function

1	2	3	4
---	---	---	---

off	off	off	off
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Operates as signalling and GSM/GPRS system

ON			
	off	off	off

On-site configuration. Serial interface to the PC by means of the programming cable

	ON		
off		off	off

Diagnostics to the serial interface by means of a terminal programme

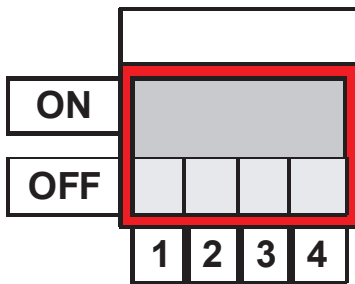
ON	ON		
		off	off

Reset all default settings by applying the operating voltage

			ON
off	off	off	

Firmware update

# DIP Switches - top and bottom



DIP switch

Function

1	2		3	4
---	---	--	---	---

Analogue signal conditioning to voltage

x	x			
			off	off

Analogue input for voltage supply to the ports AI4 and AI2

x	x			ON
			off	

Analogue input for amperage to the ports AI4 and AI2

x	x		ON	
				off

Analogue input for temperature sensor PT1000 to the ports AI4 and AI2

			x	x
off	off			

Analogeingang für Spannung für die Ports AI3 und AI1

	ON		x	x
off				

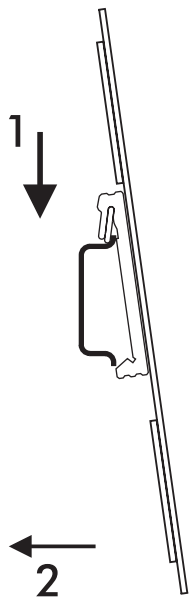
Analogue input for voltage supply to the ports AI3 and AI1

ON			x	x
	off			

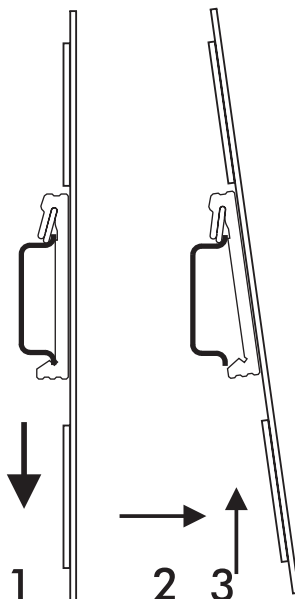
Analogue input for amperage to the ports AI3 and AI1

# Mounting

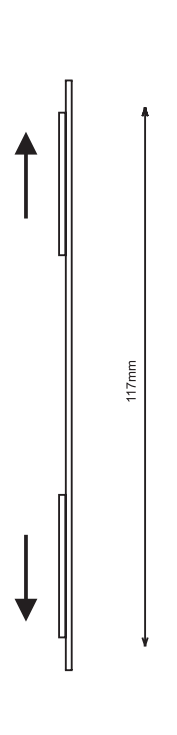
The IE-GRPS-IO is for wall mounting and DIN-Rail mounting.



DIN-Rail mounting



Taking off the DIN-Rail



Wall mounting  
Remove the infolded brackets  
Fix the brackets out-foulded

## Notes for GSM-Modem

Disconnect the device from the power supply before inserting the card.

To insert the card, use a sharp instrument to undo the housing lid then place the SIM card into the tray with the chip facing upwards

## Notes on GSM modem

Standard-IP-Adress	192.168.1.120
User name	admin
Standard-password	12345

## 5 YEAR WARRANTY

Weidmüller gives a 2 year warranty on all its actively processing Industrial Ethernet products and all actively processing I/O-Interface products in accordance with the warranty terms as described in the general conditions of sale of the Weidmüller company which has sold the products to you.

In addition to the 2 year warranty, Weidmüller warrants to you for a period of 3 additional years that such products the defects of which have already existed at the time when the risk passed will be repaired by Weidmüller free of charge or that Weidmüller will provide a new, functionally equivalent product to replace the defective one.

The warranty referred to above covers Weidmüller products. Save where expressly described otherwise in writing in this catalogue/product description, Weidmüller gives no warranty or guarantee as to the interoperability in specific systems or as to the fitness for any particular purpose. To the extent permitted by law, any claims for damages and reimbursement of expenses, based on whatever legal reason, including contract or tort, shall be excluded. Where not expressly stated otherwise in this warranty, the general conditions of purchase and the expressive liability commitments therein of the respective Weidmüller company which has sold the products to you shall be applicable.

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