

BIOS-GSM-01

Universal IoT module for GSM/LTE and MODBUS RTU communication
with 1 x ISOLATED DIGITAL INPUT + 1 x NO RELAY OUTPUT



A universal IoT module equipped with a GSM/LTE modem, a MODBUS RTU (master) interface and a basic I/O set. The module acts as a fully managed gateway between the MODBUS network and the GSM/LTE network.

BIOS-GSM-01 enables full management of slave devices on the MODBUS RTU bus. It fully supports the MODBUS standard and handles all read/write commands. GSM/LTE connectivity and support for the MQTT/SSL/Azure protocols enable efficient integration with all available cloud platforms.

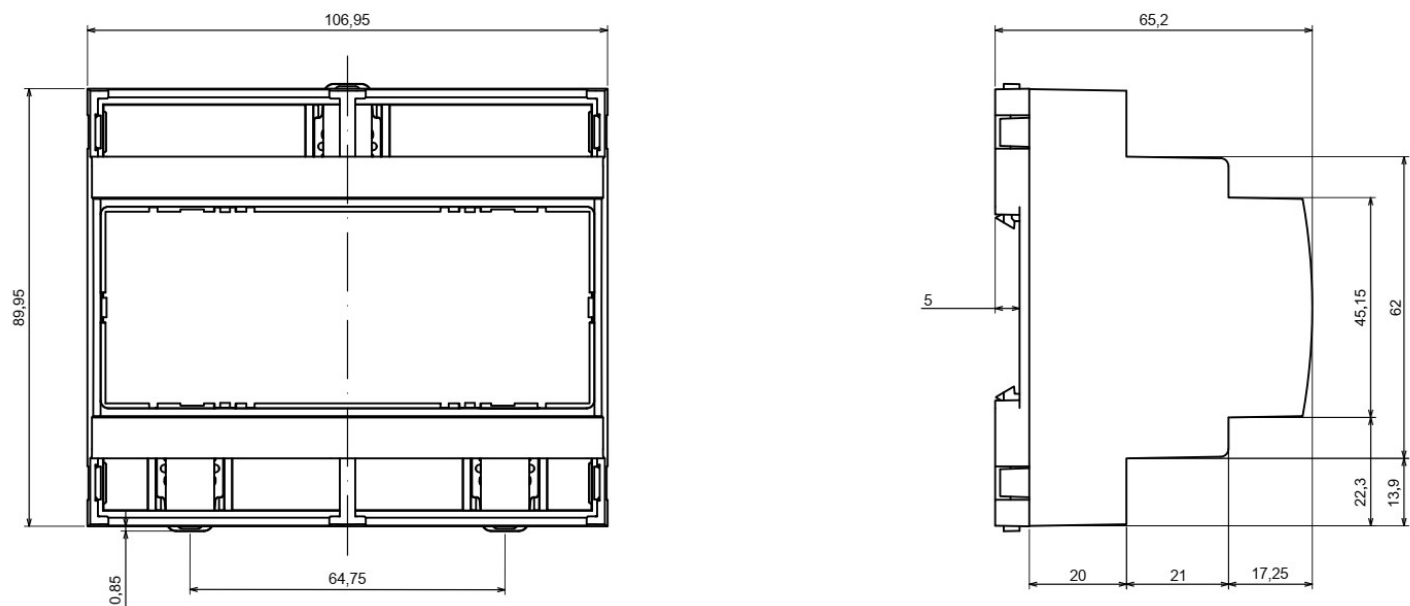
An additional set of basic digital inputs and outputs allows extra equipment to be handled, digital signals to be read reliably and actuators/output/control devices to be built for all kinds of machines, devices, robots, controllers, etc. The current device status and the I/O states are indicated by LED indicators, which makes installation quick and minimises wiring errors.



Technical data:

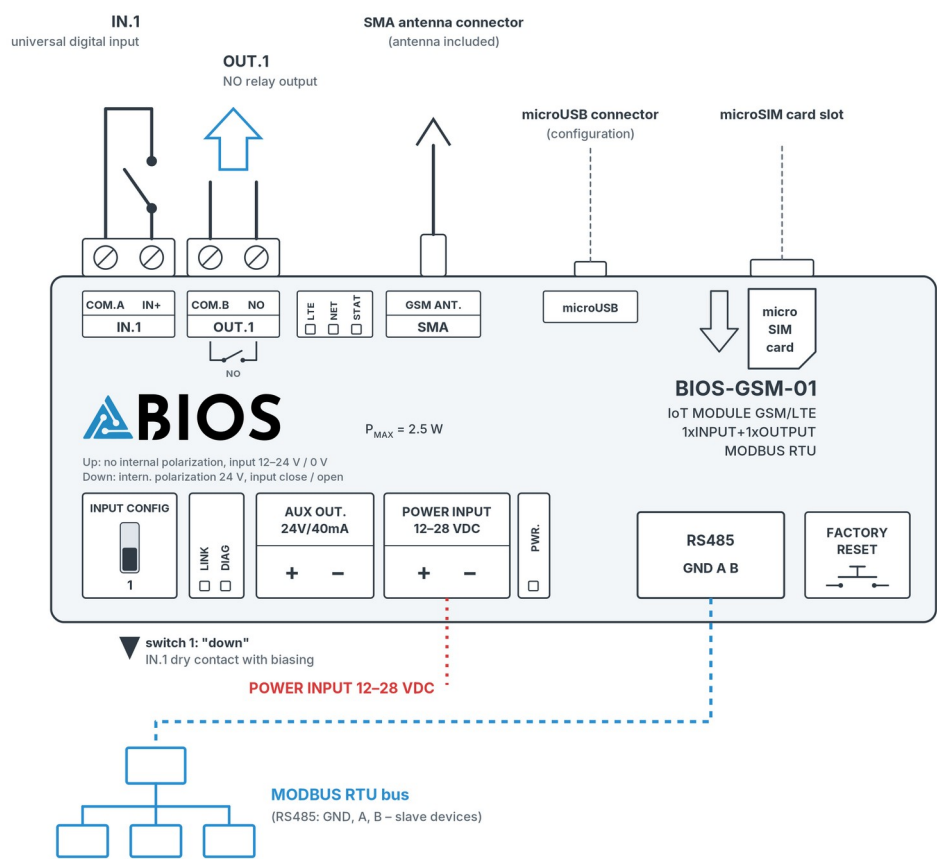
Digital inputs	1
Digital input type	isolated voltage 0–24 V or dry contact (NO) with 24 VDC bias
Input type selection	YES, using DIP switches
Pulse input	YES, max. 3 kHz
Relay outputs	1
Relay output type	isolated, NO, max. 2 A, service life 5x10 ⁶ cycles
Relay output operating mode	static ON/OFF, pulse mode
Input / output status indication	YES, LED indicators
Device status indication	YES, LED indicators
Device configuration	YES, locally via microUSB and remotely via the cloud
Communication	LTE Cat4, UMTS/HSPA, GSM/GPRS/EDGE, 4G/3G/2G
Supported frequency bands	LTE-FDD: B1/3/5/7/8/20/28, LTE-TDD: B38/40/41 WCDMA: B1/5/8 GSM: B3/8
Supported protocols	MODBUS RTU, TCP, UDP, PPP, NTP, NITZ, FTP, HTTP, PING, CMUX, HTTPS, FTPS, SSL, MQTT, MMS, SMTP, SMTPS
Power supply	main connector: SELV 12–28 VDC
Power consumption	max. 2.5 W
Built-in protection	thermal, overload
Connector type	screw terminals 0.35–2.5 mm ² (AWG 24–14), 0.8 Nm max.
Mounting	35 mm DIN rail
Enclosure	ABS UL94V-0, light grey, 6xDIN size
Mechanical dimensions	107 x 90 x 65 mm
Mounting orientation	any
Operating temperature	-35°C to +60°C
Storage temperature	-40°C to +85°C
Operating and storage humidity	RH<90% (non-condensing)
IP rating	IP20
Weight	160 g
Protection class	III / SELV
External antenna connector	SMA female

Mechanical dimensions:



All dimensions in millimetres.

Example wiring diagram:



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