

## ROADSIDE UNIT CONTROLLER

# GNOM-20

*GNOM-20 is a universal microprocessor platform designed to integrate of ITS implementation components as part of the construction and configuration of traffic management system roadside stations.*

*GNOM-20 enables independent creation of the roadside station functionality by integrators or suppliers of electronic devices made by various manufacturers.*

*GNOM-20 allows to standardize the method of data exchange between roadside stations and the traffic management centre thanks to the use of the MODBUS/MOHER communication protocols.*

*GNOM-20 enables the communication of roadside stations with the traffic management centre in the client-server architecture, which allows for on-line operation of devices, increasing the functionality, efficiency and reliability of the traffic management system.*

*GNOM-20 allows to control and automatically regulate the climate of the control cabinets, control the main power status, battery charge status and the door opening status.*



### TECHNICAL DATA

<b>Interface</b>	Ethernet 10 Mb/s
<b>Communication protocols</b>	Modbus, Moher, MQTT, JSON
<b>Inputs/outputs</b>	2 x RS232/RS485 with galvanic separation, 2 x 24V analogue inputs, 2 x digital inputs (dry contact to the ground), 6 x digital outputs 350 mA, max. 28V
<b>Processor</b>	CPU: GG380 ARM Cortex M4, 48 MHz Ethernet: LG980, ARM Cortex M3, 28 MHz
<b>Memory</b>	Flash SPI up to 128 MB, 100 thousand read/write operations, data retention over 20 years
<b>Programator</b>	J-link class, TCP-IP, built-in with debugger
<b>Supply voltage</b>	12 - 24 VDC
<b>Development environment</b>	Eclipse IDE or similar
<b>RTC clock</b>	RTC+NVRAM with battery backup (supercapacitor in option)
<b>Environmental measurements</b>	thermohigrometer embedded
<b>Local service</b>	configuration buttons, OLED display embedded
<b>Power consumption</b>	typical 850 mW
<b>Working condition</b>	
Temperature	-35 ... +65 °C
Ingress protection	IP30
<b>Mechanical</b>	
Width x height x depth	108 x 90 x 60 mm
Weight	260 g
Assembly	35 mm DIN rail

