

Unipi Gate G110

PRODUCT DESCRIPTION

Unipi Gate G110 is a programmable Linux gateway and logic controller (PLC) featuring a pair of Ethernet ports and two RS485 ports. Thanks to its software openness, it is a universal gateway for the field of industrial automation and HVAC applications. In these projects the gateway can work as a control element or as a data logger for SCADA and MES control systems. With its internet connectivity, it is a suitable solution for modernization of older „brownfield" installations. The gateway can be installed in applications as an end device of cloud services representing the basis for Smart City, Smart Factory, IoT, IIoT and Edge computing projects utilizing a large volume of aggregated data.

COMPUTING MODULE

Quad-core 600 MHz ARM A53 CPU, 512 MB DDR3 RAM, 16 GB onboard eMMC memory.

FUNCTIONALITY

Edge computing, cloud computing, gateway between serial communication and Ethernet (internet), local control device, HVAC communication module, industrial automation, Smart Factory, Smart City, IoT, IIoT.

FEATURES

Communication interfaces

2 × RS485
1 × 1 Gbit Ethernet
1 × 100 Mbit Ethernet

Software

- OS Linux (Debian) – implementation of your SW, access to serial lines using standard Linux method
- Open-source solutions – Node-RED, Python, C, C++ and others

Other features

- Extendable memory storage using microSD
- Durable aluminium chassis (IP20)
- Ethernet interface act as a switch (bridge)
- Working temperature 0 °C to 55 °C
- Available in OEM variant
- Real Time Clock backup (up to 7 days)
- Installation to a DIN rail (35 mm), optionally on an electrical cabinet mounting plate
- LED indication of RS485, user LEDs

COMMUNICATION

Ethernet	1 × 1 Gbit Ethernet 1 × 100 Mbit Ethernet
Serial/bus channels	2 × RS485
RS485 baud rate	Up to 1 Mbaud
RS485 galvanic isolation	Yes
RS485 pull-up/pull-down resistance	Yes, 560 Ω
RS485 terminating resistor	Attachable, 120 Ω
USB	1 × USB 3.0 (for service)
Ext. memory storage	1 × Micro SD up to 128 GB capacity

DIMENSIONS AND WEIGHT

Dimensions	35 × 94 × 70 mm
Weight	140 g

POWER SUPPLY

Rated voltage - SELV	9–30 V⎓
Power consumption	Typ. 3 W Max. 12 W
Reverse polarity protection	Yes

WORKING AND INSTALLATION CONDITIONS

Working conditions	0 °C ... +55 °C, rel. humidity 10 % ... 95 %, without aggressive substances, condensing vapours and fog
Storage conditions	−25 °C ... +70 °C, rel. humidity 10 % ... 95 %, without aggressive substances, condensing vapours and fog
Degree of protection IP (IEC 529)	IP 20
Working position	Horizontal / Vertical
Installation	To a 35mm DIN rail in a distribution box (holder included in the package) On an electrical cabinet mounting plate (wall mount can be purchased individually)
Connection	Pluggable screw terminals
Wire gauge	Power supply terminal - max. 2.5 mm^2 RS485 terminal – max. 1.5 mm^2

DIRECTIVE COMPLIANCE

EMC:	**2014/30/EU**
RoHS:	**2015/863/EU**
WEEE:	**2012/19/EU**