



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.

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

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.

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

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|---|--|
| 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

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|-------------------|-----------------|
| Dimensions | 35 × 94 × 70 mm |
| Weight | 140 g |

POWER SUPPLY

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|------------------------------------|-----------------------|
| Rated voltage - SELV | 9–30 V _{DC} |
| Power consumption | Typ. 3 W Max. 12 W |
| Reverse polarity protection | Yes |

WORKING AND INSTALLATION CONDITIONS

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|--|---|
| 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

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