



Main applications

- Automation systems
- Plastic processing machines
- Packaging and packing machines and lines
- Woodworking machines
- Food processing machines
- Test benches

Main features

- Installation: on R-BUS (x) backplane
- Programming: IEC 61131-3
- RS485 Modbus Master-Slave port
- Ethernet Modbus TCP port
- USB port for program update (option)
- 16 I/O modules
- In Conformity with UL508

PROFILE

CPU module that allowed development of high-performance modular PLCs.

Installed on R-BUS(x) backplane with GILOGIK II series I/O modules.

R-CPU300 is programmed according to standard IEC 61131-3 and controls up to 16 I/O modules.

It has Ethernet port with Modbus TCP protocol for network/debug connection and RS485 port with Modbus RTU protocol to dialog with other devices (such as Geflex, GFX4, instruments, drives, etc.).

An optional USB port can be added to manage application program updating. High-capacity memory: the program (including source) is stored on Flash Eprom.

Retentive data is saved on static RAM with rechargeable lithium buffer battery. The execution program is loaded on dynamic RAM.

TECHNICAL DATA

SDram:

16MB

Retentive memory:

256kB buffered

Program memory:

32MB

PLC cycle time:

min 1ms

Processing time for 1K IL instruction:

40µs

Interfaces

- RS485 port Modbus RTU (slave) protocol
- Ethernet port Modbus over TCP protocol
- USB (optional) to manage program

Battery

- Lithium, rechargeable
- Duration without power supply: > 200 days
- Expected duration: > 7 years

Power supply

24Vdc ±25%, max. 2A

Diagnostics

- Yellow POWER LED: power on
- Green RUN LED: program running
- Red FAIL LED: module or system in alarm
- Yellow LINK LED: network connected
- Green DATA LED: data transfer

MECHANICAL CHARACTERISTICS

- Dimensions: 92x92x25,4mm
- Weight: 150 g
- Fastening: mechanical, snaps on R-BUS (x)
- Protection level: IP20
- Power connector: 2-pin female with spring clamp
- Ethernet interfaces: RJ45 connector
- USB interfaces: type A (option)
- RS485 serial interface: RJ10 connector

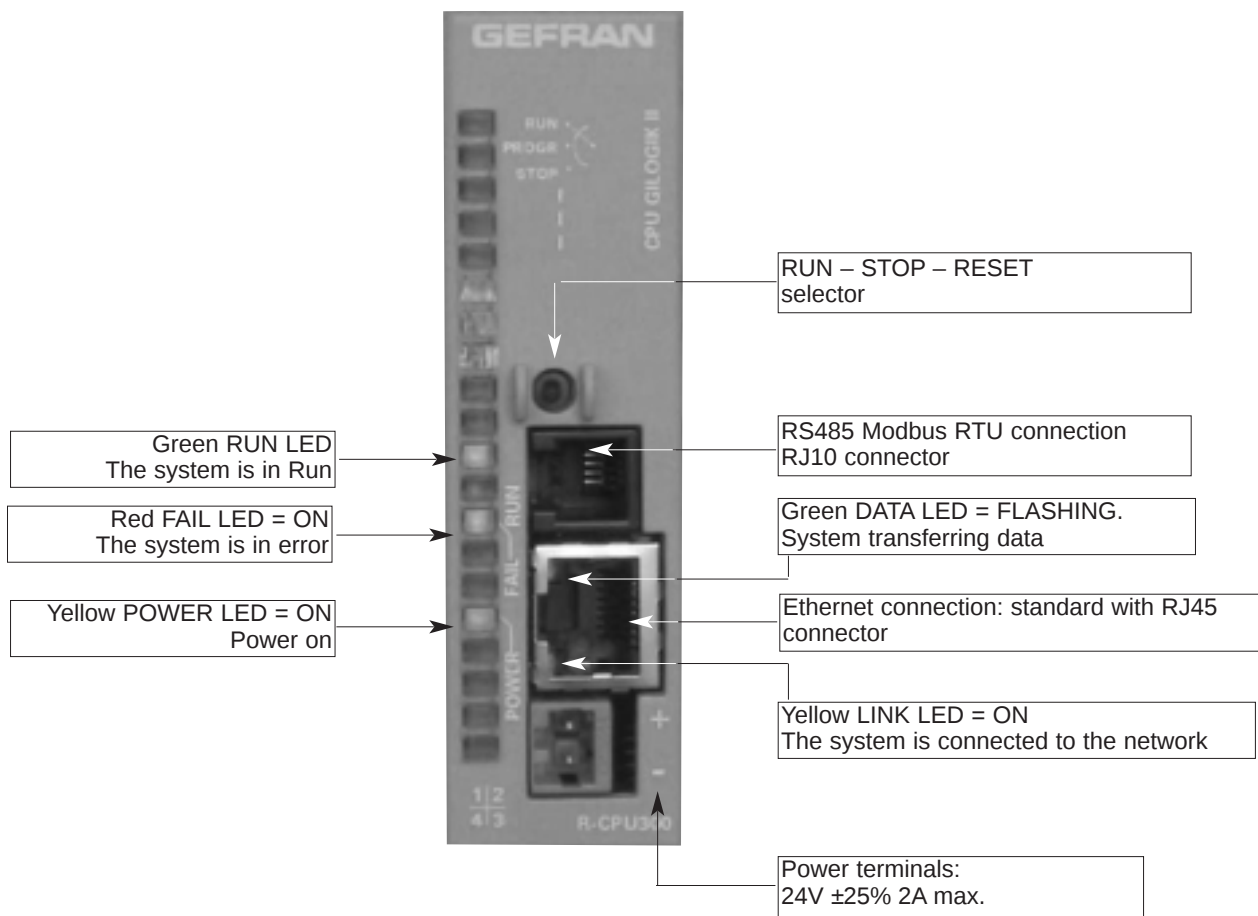
AMBIENT CONDITIONS

Working temperature: 0...50°C

Storage temperature: -20...70°C

Humidity: max. 90% RH non-condensing

FACEPLATE DESCRIPTION



INSTALLATION AND CONNECTIONS



The module installs on the R-BUS(x) in the first slot on the left.

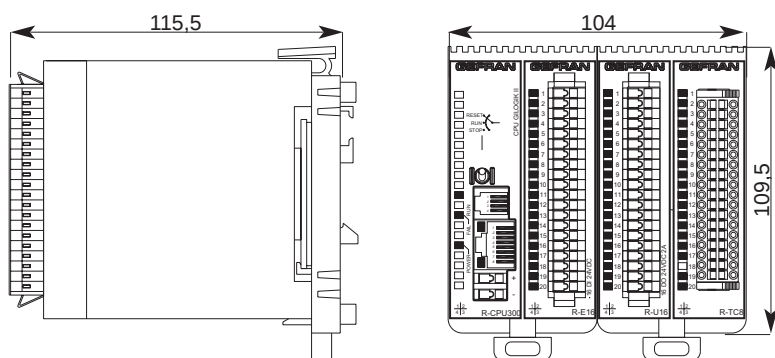


Max 16 module I/O

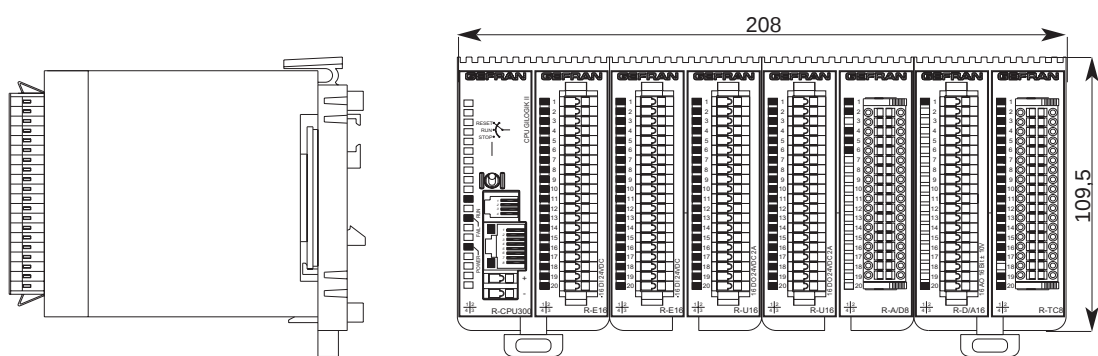
(*) With the 18-slot bus, slots 1 and 2 are reserved for modules R-CPU300 or R-SW5.

DIMENSIONS

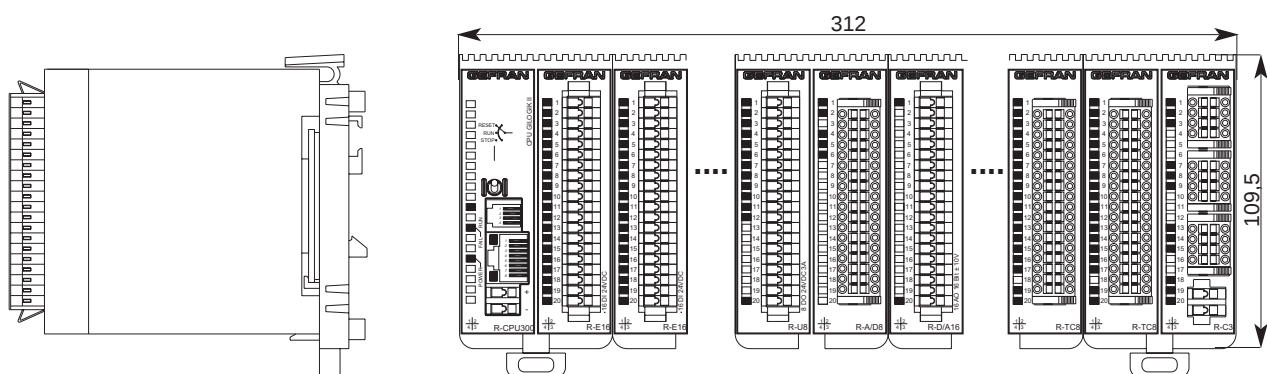
4 SLOT



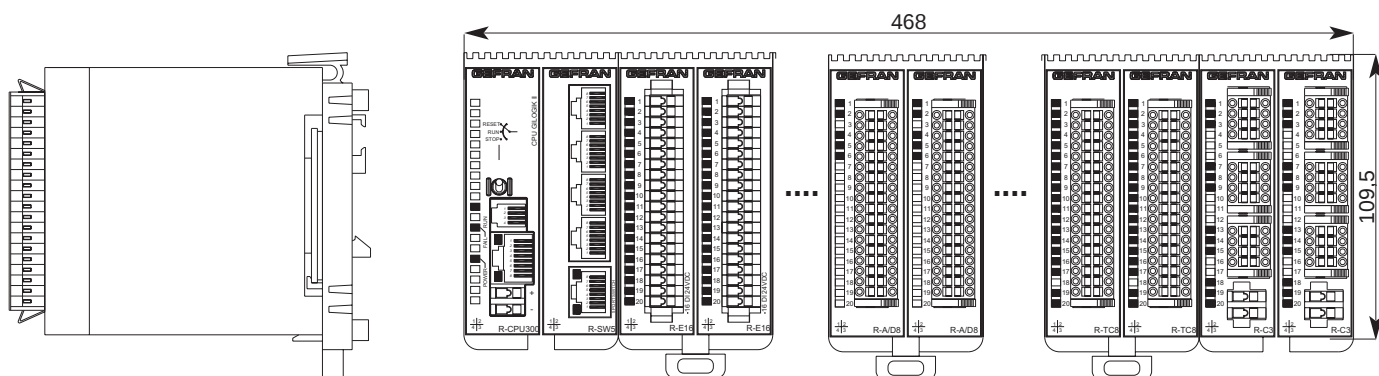
8 SLOT



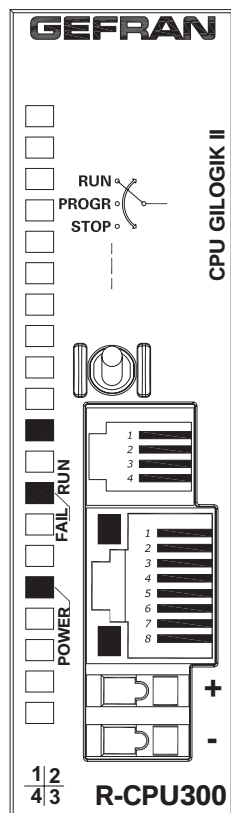
12 SLOT



18 SLOT



CONNECTIONS



CPU GILOGIK II

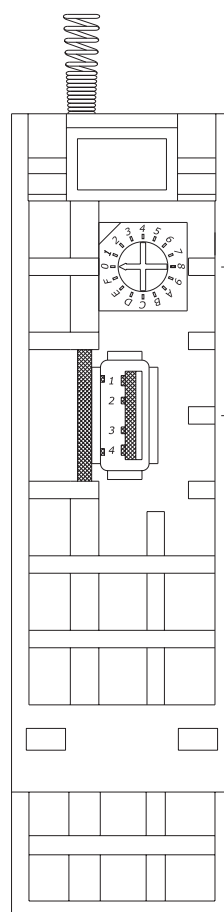
485 serial line
— RJ10 —

- 1 = GND_485
- 2 = TX/RX +
- 3 = TX/RX -
- 4 = N.C.

Ethernet network(*)
— RJ45 —

- 1 = TX+
- 2 = TX-
- 3 = RX+
- 4 = RX-
- 5 = N.C.
- 6 = N.C.
- 7 = N.C.
- 8 = N.C.

Power supply (**)
— + 24Vcc ± 25%
— - Max 2A



Node selector

- 0 = INACTIVE
- 1...F = NODO 1...F (1...15)

USB connection (optional)

- 1 = Vcc
- 2 = DATA -
- 3 = DATA +
- 4 = GND

(*) Use standard category 6 cable according to standard TIA/EIA-568A

(**) Use unipolar cable with 1-1.5 mm section. Do not attach a lug to the cable.

ORDER CODE

R-CPU300

VERSION

0	without USB port	cod. F032733
1	with USB port	cod. F032732

GEFRAN spa reserves the right to make any aesthetic or functional change at any time and without prior notice



Conformity UL508 File no. E198546



The device conforms to European Union Directives 89/336/CEE and 73/23/CEE with reference to generic standards: **CEI-EN 61000-6-2** (immunity in industrial environment) – **EN 61000-6-3** (emissions in residential environments) – **EN 61010-1** (safety) – **EN 61161-2** (product standard)