

TECNOLOGIX GWA

IoT Gateway and Industrial Automation Controller with Fieldbus connectivity

INDUSTRY 4.0



Tecnologix GWA is a multifunction Industrial Automation system, conceived to operate as a programmable I/O device and as a communication gateway to industrial fieldbuses and Cloud.

The Gateway communicates with the most popular standard fieldbuses, as

- CANopen, DeviceNet, J1939 (CAN based)
- Modbus/TCP, Profinet, Ethernet PowerLink, EtherCAT (Ethernet based)
- Modbus RTU, Profibus (RS485 based)

Ethernet, WiFi and 4G interfaces allow sharing process data with the Cloud via IoT standard protocols such as CoAP, MQTT or LWM2M.

The User can control all the digital and analog I/O interfaces by writing their own automation procedures, by means of the integrated LogicLab IEC-1131 SoftPLC or directly using the C/C++ language.

CHARACTERISTICS

- ⊕ 24 V insulated power supply with RF filter and Low Voltage indication alarm
- ⊕ 2 x RS232/RS485 optoisolated serial interfaces
- ⊕ 2 x CAN bus optoisolated
- ⊕ 8 x 24V Digital Inputs w/ status LEDs
- ⊕ 2 x quadrature encoder inputs
- ⊕ 8 x 24V Digital Outputs w/ status LEDs, blow fuse and short circuit alarm
- ⊕ 2 digit, 7 segment display + 4 status LEDs
- ⊕ 8 x DIP switches
- ⊕ STM32H7 - 32 bit Arm Cortex-M7 @480 MHz - 2 MB Flash + 1 MB RAM, 12 bit A/D Converter.
- ⊕ 1 x USB OTG interface for PC connection and USB pen drive read/write.
- ⊕ 1 x Micro SD-CARD
- ⊕ 1 x Lithium cell for RAM backup
- ⊕ 1 x 10/100 Mbit/s Ethernet interface
- ⊕ Single or dual Ethernet connector with integrated high-speed switch.
- ⊕ Expansion connector for analog and digital I/O
- ⊕ Fieldbus expansion connector for EtherCAT, Profibus, Profinet
- ⊕ Expansion connector for WiFi/Bluetooth or 4G interface

CERTIFICATIONS

- ⊕ CE, UL

DIMENSIONS

- ⊕ Steel box 180 x 120 x 50 mm

GWA is supported by a wide choice of development tools

arm KEIL

KEIL MDK-ARM with TÜV Qualified (*) ARM C Compiler and long term maintenance
<http://www.2keil.com/mdk5/safety>

LOGIC LAB

LogicLab IEC 61131 SoftPLC from Axel s.r.l.
<http://www.axelsw.it/>

(*) Arm C/C++ Compiler is TÜV qualified for Safety Critical applications

IEC 61508 for electrical systems
ISO 26262 for automotive industry
IEC62304 for medical systems
EN 50128 for railway applications



TECNOLOGIX IS PART OF



DIGITAL/ANALOG I/O EXPANSION

- ⊕ 16 x 24V Digital Inputs with status LEDs
- ⊕ 16 x 24V Digital Outputs with status LEDs
- ⊕ 4 x analog inputs (0...10V or +10/-10V)
- ⊕ 1 x analog input for temperature sensor PT1000
- ⊕ 1 x quadrature encoder input

DIGITAL I/O EXPANSION

- ⊕ 16 x 24V Digital Inputs with status LEDs
- ⊕ 16 x 24V Digital Outputs with status LEDs
- ⊕ Up to 4 stackable I/O interfaces

ANALOG I/O EXPANSION

- ⊕ 8 x analog inputs (0...10V or +10/-10V)
- ⊕ 1 x analog input for temperature sensor PT1000

Industrial Ethernet EXPANSION

- ⊕ EtherCAT, Profinet, Ethernet/IP, Ethernet PowerLink

WiFi/4G IoT EXPANSION

- ⊕ WiFi/Bluetooth or 4G Modem

Other expansions on request

