



GX IO-Extender 150



GX IO-Extender 150 - front view



GX IO-Extender 150 - rear view



Node-RED node

The GX IO-Extender 150 enhances the input and output (I/O) capabilities of a GX device, enabling seamless integration with additional sensors, controls, and external devices. It connects via USB, which also serves as its power source, providing a simple and efficient expansion solution. The device can be controlled using Node-RED on the GX device as well as the Switch pane in the user interface.

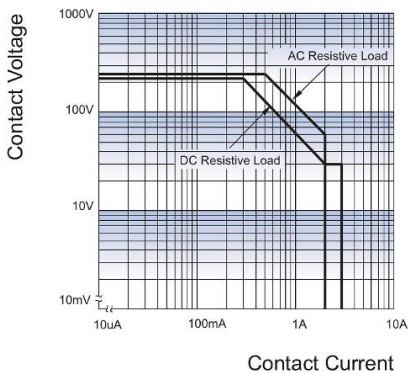
Features

- 8 digital I/Os, configurable as 8 inputs, 8 outputs or 4 inputs + 4 outputs
- PWM output for precise control applications
- Two latching relays for low-power switching
- A solid switch for controlling DC loads that can be resistive, capacitive or inductive (such as the coil of a high-power contactor)
- Pluggable spring terminals for fast and secure connections
- Configurable via Node-RED for easy automation and custom logic

Technical Note: The digital outputs can source 4mA max. When driving 4mA, the voltage drop across the internal series resistor (560 Ω) is 2.24V, which leaves only 2.76V @ 4mA for the output signal. Therefore, a driver like a transistor or FET is required to switch a relay with a digital output.

GX IO-Extender 150		
Supply voltage	Powered by USB	
Power consumption	< 100 mW when idle, max. 1 W (< 200 mA @ 5 V)	
Mounting	Wall or DIN-rail (by using adapter accessory)	
Input and Output connectivity		
Digital I/Os (isolated from USB)	8 I/Os with LEDs indicating state, configurable as 8 inputs, 8 outputs or 4 inputs + 4 outputs Inputs: 3.8 – 5.5 V, Outputs: 5 V, 4 mA max The digital I/Os are capable to handle voltages up to 5.5 V. Any overvoltage can cause permanent damage	
PWM output (isolated from USB)	4 channels with LEDs indicating the state Voltage level: 5 V, Precision: 8 bits @ 1,5625 kHz	
Latching relays (potential free)	2x latching relays (bi-stable) with LEDs indicating the state Contact rating (resistive load): DC: 3 A @ 30 V, 1 A @ 60 V, 0.3 A @ 220 V (90 W max) AC: 2 A @ 60 V, 1 A @ 125 V, 0.5 A @ 250 V (125VA max) Max switching power: See graph on the left	
Solid switch (isolated from USB)	Max battery voltage:	70 VDC
	Max load current:	4 A
	Max capacitive load:	Vbat up to 15 V: 1000 µF 15 V < Vbat < 30 V: 400 µF 30 V < Vbat < 70 V: 50 µF
	Max inductive load:	Up to 1 A: 1000 mH 1 A < I < 2 A: 100 mH More than 2 A: 10 mH
Dimensions		
Outer dimensions (h x w x d)	123 x 67 x 23 mm	
Weight	0,170 kg	
Operating temperature range	-20 °C to +50 °C	

MAXIMUM SWITCHING POWER



Latching relay contact switching power depending on voltage and current