C	A B COM Relay 1	A B COM Relay 2	BAT- Load BAT+ Solid Switch	þ
	A: Blue B: Orange	A: Blue B: Orange	e — Load on	
CE GX	X IO-Extender 150		CE iii	
44483	Mode: ON = O Channel 1-4 -	utput / OFF = Input Channel 5-8	www.victronenergy.com	
	STATE 0 0 0	00000 0N 5678	1 2 3 4 STATE	
Q	Digital I/O	Digital I/O	PWM CND	P

GX IO-Extender 150



## GX IO-Extender | Output 1 state

Node-RED node

## MAXIMUM SWITCHING POWER



Relay contact switching power depending on voltage and current 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-state relay (SSR) for high-speed switching of 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

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						
	8 I/Os with LEDs indicating state, configurable as 8 inputs, 8 outputs or 4 inputs + 4 outputs					
Digital I/Os (isolated from USB)	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					
	2x latching relays (bi-stable) with LEDs indicating the state					
Relays	Contact rating (resistive load):					
(potential free)	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					
	Max battery voltage:	70 VDC				
	Max load current:	4 A				
Solid State Relay - SSR (isolated from USB)	Max capacitive load:	Vbat up to 15 V: 1000 μF 15 V <vbat<30 400="" v:="" μf<br="">30 V<vbat<70 50="" td="" v:="" μf<=""></vbat<70></vbat<30>				
	Max inductive load:	Up to 1 A: 1000 mH 1 A <i<2 100="" a:="" mh<br="">More than 2 A: 10 mH</i<2>				
Dimensions						
Outer dimensions (h x w x d)	123 x 67 x 23 mm					
Weight	0,170 kg					
Operating temperature range	-20 ℃ to +50 ℃					

