

COM-IO Series
Command and control operation
custom product



The COM-IO Series offers flexibility in terms of output voltage range and polarity. It accepts AC or DC input referred to as universal supply input. It presents multi-channels providing voltage sources to feed several electronic devices simultaneously or separately. This multi-channel control/command board can for example drive up to 8 pulse generators of the GIPO* type to supply Pockels' cells with energy. Each channel holds an additional synchronisation input allowing the connection of elements such as flash lamps or laser diodes. Full remote command and control can be achieved since the board is fitted with a RS232/RS485 serial port or a RS232/RS485 serial port or a field bus adapter for protocols such as Profibus-DP V0 and V1, CANopen, DeviceNet, Ethernet 10Mbps, Fast Ethernet 10/100Mbps, Interbus, Lonworks, I²C. (interface or protocol must be precised in specifications).

*not included

As an example of our manufactures, see the characteristics of our 8 channel board driver for Pockel Cells.

Specifications	
Input voltage Vin	universal 85-264 VAC, 50/60Hz
Mains command	ON/OFF switch not inhibited in remote control mode
Mains fuse	delayed, rated at 1.25A
High voltage command	enlighted ON/OFF push button Pousoir not inhibited in remote control mode
Control channels	8, each one holding two synchronisation inputs
Pockels' cells supplying	24V power supplies with an independent current regulation (to prevent any functioning default)
Command settings retaining during OFF mode	saving batteries
Stocking temperature range	-10°C to +75°C
Functioning temperature range	0°C to +40°C

Available commands	Local mode commands available for each one of the 8 channels	Remote control mode Via serial port or Field bus commands available for each one of the 8 channels
Local/remote control mode	by an interrupter	remote control mode
Channel selection	by a 8-step switch	remote control mode
Channels supplying shut down	by a safeguard interrupter	
Channels inhibition	by an interrupter for each channel independently or by a push button for the whole channels	remote control mode
Live setting on the selected channel	by a potentiometer. NB : whatever is his position, the potentiometer retakes the last value which was set at the last use of the selected channel.	remote control mode
Live LCD display for each of the 8 channels		
Specification of the present voltage command output	resolution : 12 bits, so a step of 2,44mV on a 10V full scale	remote control mode
Specification of the high voltage monitoring	resolution : 16 bits, so a step of 152µV on a 10V full scale	remote control mode
Present setting value	before it's confirmed	remote control mode
Leds display for each of the 8 channels		
Power supply running display	8 leds « validity »	
Channel selection display	8 leds « selection »	
Channel inhibition display	8 leds « inhibition »	

Rear side connections	
Mains supply	IEC 220 Volts plug with locking strap enabling an accidental unplug
Control channels	8 channels constituted as follow : 1 sub-D plug 2 BNC plugs for synchronization signals
Command and control	serial port or field bus connector and his bus address selector
Auxiliary 24 Volts connector (optional)	precision 1%, 200ppm/°C

Safeguards	
Inputs and outputs available	by safeguard diodes on the rear side connectors
Output operational amplifier	protected from shortcuts
Auxiliary 24V output	by delayed fuse rated at 1.25A

Mechanical configuration	
Case	standard rack case 19" 2U with handles
Dimensions	L280 x W482 x H89 mm

