



## General Purpose Input/Output Logic Converters



**GPIO-1212-CVT Shown**

### Introduction

The GPIO-CVT Logic Converter Modules are special versions in the GPIO General Purpose I/O Module family. They may be used for buffering signals, level translation, and/or logic inversion. They feature opto-isolated inputs and either Solid State Relay (Form A) or Electro-Mechanical Relay (Form C) outputs. Two models are available as shown below.

### Applications

The GPIO-CVT modules can be used convert:

- N.C. Circuits to N.O. Circuits
- N.O. Circuits to N.C. Circuits

To convert contact closures, tie one side of the inputs to a common level and switch the other side so that the input sees a voltage across it in one condition and no voltage in the other condition.

### Inputs

The input circuitry of both types of modules is similar. Each has 12 inputs:

Active: 12 to 48 VDC (nominal) in  
 Inactive: < .5V  
 Input Current: 8 mA max (at 48V)  
 Max Input: 60 VDC  
 Opto Isolated Not referenced to ground

### Solid State Relay Outputs

The GPIO-1212-CVT module has 12 output circuits:

Type: Isolated FET SSR  
 Active: Closed (2 Ohm Max)  
 Inactive: Open (max 2 uA leakage)  
 Max Current: 500 mA  
 Max Voltage: 60 VDC

### Electromechanical Relay Outputs

The GPIO-1208-CVT module has 8 output circuits:

Type: Electromechanical Form C  
 Max Current: 1 A Max. Resistive  
 Max Voltage: 48 VAC/VDC

The first 8 inputs of the GPIO-1208-CVT drive the output relays. The last 4 inputs can be used for General Purpose inputs in the MCN system.

### Models

Part Number	Model	Opto-Isolated Inputs	Outputs	Logic
S2-61418	GPIO-1212-CVT	12	12 Solid State Relays (Form A)	Straight Through or Invert
S2-61467	GPIO-1208-CVT	12	8 Electromechanical Relays (Form C)	Straight Through or Invert

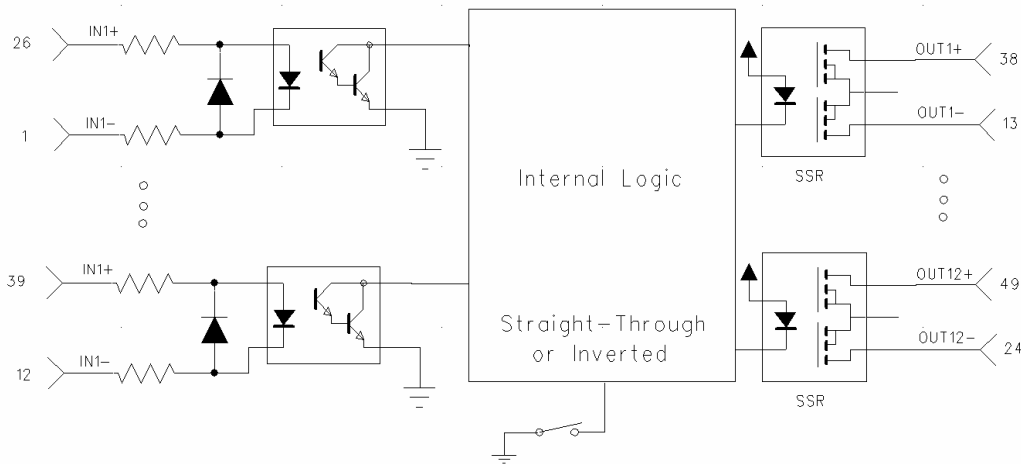
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**Typical I/O Configuration (GPIO-1212-CVT shown)**

**General Specifications**

Size (MCN Size A)	5.5" x 4.2" x 1.5" (140 x 107 x 38 mm)		
Weight	24 oz		
Temperature	0-50 °C		
Humidity	10- 95% non-condensing		
Inputs (Optically Isolated)	12 – 48 VDC (60 VDC Max)	8 mA max at 48 V input	
Logic, Switch Selectable	Straight through or Inverted. Applies to all circuits Custom logic available, contact factory for quotation.		
Outputs	SSR Electromechanical	SPST (Form A) SPDT (Form C)	Max Voltage: 60 VDC Max Voltage: 48 VAC/VDC 500 mA Max. 1 A Max. Resistive
Indicators:	Power, Input and Output LEDs		
Equipment Connector	50 pin Telco style, Female		
Network Connectors	(2) RJ-45 (1 in, 1 out) Used to pass power to downstream module		
Network Cabling	4 Pair Level 4 UTP		
Power Input	+12 to +30 VDC / 4 W		

**Accessories**

Part Number	Description
S2-60435	MCN Quad 19" Rack Mount Kit (Mounts 4 size A modules) 1 RU high
81-10398	MCN Power Supply 115 VAC (Powers 4 MCN Size A modules)
S2-61420	Manual, GPIO-CVT
S2-61421	Manual, MCN 48VDC Power Supply
89-10837	Cable Assy 25 Pr Male-Male 25'
31-10354	Punch Block, Dual 25 Pair