



MasTec Limited

Catalog 11A

The Ingenious Devices and Smartworks Company



OPTO 22 Products

MasTec Limited carries a large stock of OPTO 22 components. We have in stock most OPTO 22 products, even the original 1980's Classic modules, the Quad Classic Modules, the G4 series modules, all the older OPTO Mux Brains and and backplanes.

If you are using OPTO 22, you should email us and ask for the latest OPTO 22 CD, it is superb.

If you are new to OPTO 22, you will be knocked over by these products.

OPTO 22's range of products are very extensive with a broad range of Solid State Relays for switching AC and DC from low currents to 45 amps in the AC range and 5 amps in DC

They also make distributed I/O measurement and Control systems with great software that uses Flow Charts.

Replace PLCs and get into more modern technology.

In New Zealand and Australia there are various types of users for the OPTO 22 products:

1/ Machine and system Builders of Power Control Systems (DC and AC)

OPTO 22 are makers of Solid State Relays (SSRs), their range includes AC or DC controlled AC switching modules, also DC controlled DC switching modules. The range extends all the way up to 575VAC 45 amps, with isolation to 4000VAC. Current surges can be 10 times rating.

2/ Users who want to save their I/O in PCM/PLC/PSC/Controller by using Isolation Protection and Level Shifting OPTO 22 Modules

OPTO 22 make a large range of backplanes that allow easy connection to PLCs etc and offer 4000 VAC isolation from inputs to outputs. Also if your PLCs have 24, 15 or 5 VDC logic level inputs and you are required to monitor 230 VAC or ?, the OPTO 22 modules will level shift these high voltage inputs, either AC or DC down to 24, 15 or 5 VDC logic levels with 4000VAC isolation.

3/ PC Based and Network Controller Distributed Measurement and Control (Ethernet, RS-485, Arcnet, Fiber, Profibus, DeviceNet)

From an Windows NT/2000 PC or an OPTO 22 network controller, connect to OPTO 22 modules using direct digital I/O or OPTOMUX RS-485, PAMUX Parallel dig-

ital I/O or Factory Floor RS-485 or TCP/IP Ethernet. Read RTDs, thermocouples, current, voltage, encoders, counters, AC and DC digital logic levels, control with current and voltage, also set up PID loops, control AC and DC loads or logic levels. OPTO 22 invented most of this technology in the 80's and the Pamux and OPTOMUX software protocols are industry standards. Also you can use LabVIEW, BridgeVIEW, Lookout, Softwire and almost any SCADA software, even VB, C++ and more to work with these systems.

4/ Distributed Logic Control, Measurement and Control (Ethernet)

This is OPTO 22's flagship product called Ultimate SNAP I/O and the software is based around a new Flow Chart programming system similar to Factory Floor.

Build multitasking control and measurement strategies as with option 3/ but this time run the programs/strategies on several controllers at the same time.

In fact with Ultimate I/O each backplane has a controller. This is the most powerful distributed system available today.

Control local networked backplanes, RTUs, remote backplanes, drive printers, laser scanners, bar code readers etc.

5/ Use IEC-1131-3 software modules

For making true softlogic systems with OPTO 22's new SNAP I/O modules and backplanes using Ethernet or RS_485 from an NT Intel Box.

6/ A new range of SNAP-IT measurement and control modules

For monitoring IT sub systems and Infrastructure systems like Security, Power Usage, Network operation, machines, lighting, safety systems, refrigeration, ovens, UPSs, access, all across Ethernet.

Manage temperature, humidity, and security in server rooms Monitor equipment line voltage and current draw. Turn on or off fans, lights, pumps, and compressors. Monitor alarms and doors

Remotely reboot servers

If you want to learn this technology ask to loan our OPTO 22 Ethernet or RS-485 "Prove It To Me Toolkit" which allows you to connect to your PC and start build control strategies immediately.

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www.mastec.co.n

Visit our Web Site at

New Zealand contact, check your records and see if you have these details below :

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Solid State - Contact Relays

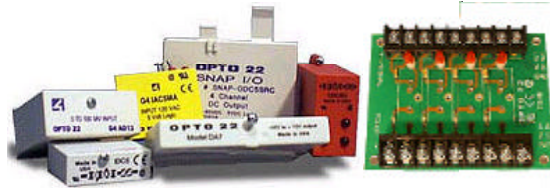
MasTec stock a large quantity of **OPTO 22 SSR** relays both AC & DC switching, with AC & DC control. Each module has a rating of 4000VAC Isolation between control & switch.

There are various models of SSRs. Hockey Puck chassis mount, PCB mount and Backplane mount.

However you may just want to protect the inputs and outputs of your expensive PLC or your PC A/D card.

Then just use modules and backplanes.

OPTO 22 make a large range of accessory products for linking their modules to PCs, PLCs etc using radio, RS-232/485, fiber, parallel, profibus, devicenet and ethernet.



Model	Switch Voltage	Current Cont/Surge	Control Voltage
Hockey Puck Style AC Series (Screw Terminal)			
120D3	12-140VAC	3/85	3-32VDC
120D10	12-140VAC	10/110	3-32VDC
120D25	12-140VAC	25/250	3-32VDC
120D45	12-140VAC	45/650	3-32VDC
240D3	24-280VAC	3/85	3-32VDC
240D10	24-280VAC	10/110	3-32VDC
240D25	24-280VAC	25/250	3-32VDC
240D45	24-280VAC	45/650	3-32VDC
380D25	36-420VAC	25/250	3-32VDC
480D10	100-530VAC	10/110	3-32VDC
480D15	100-530VAC	15/150	3-32VDC
480D25	100-530VAC	25/250	3-32VDC
480D45	100-530VAC	45/650	3-32VDC
575D15	100-600VAC	15/150	3-32VDC
575D45	100-600VAC	45/650	3-32VDC
120A10	12-140VAC	10/110	10-240VAC
120A25	12-140VAC	25/250	10-240VAC
240A10	24-280VAC	10/110	10-240VAC
240A25	24-280VAC	25/250	10-240VAC
240A45	24-280VAC	45/650	10-240VAC
Hockey Puck Style AC and DC Series (Spade Terminal)			
Z120D10	12-140VAC	10/110	3-32VDC
Z240D10	24-280VAC	10/110	3-32VDC
DC60S-3	5-60VDC	3/5	3-32VDC
DC60S-5	5-60VDC	5/10	3-32VDC
PCB Mount Style AC Series (Vertical MP Horizontal P)			
MP120D2	12-140VAC	2/20	3-32VDC
MP120D4	12-140VAC	4/85	3-32VDC
MP240D2	24-280VAC	2/20	3-32VDC
MP240D4	24-280VAC	4/85	3-32VDC
MP380D4	36-420VAC	4/85	3-32VDC
PCB Mount Style DC Series (Vertical MP Horizontal P)			
DC60P	5-60VDC	3/5	3-32VDC
DC200P	5-200VDC	1/2	3-32VDC

System Building:

Complete distributed I/O systems consist of a network controller + the I/O backplane + I/O modules.

The I/O modules may be SSR, AC/DC input isolating/ level shifting, RS-232/422/485 Comms & Analog I/O.

An OPTO 22 network controller, a softlogic PC or a PLC can act as the controller for the backplanes.



The next chart has the Backplane SSR & input modules. The backplane families are Classc, G4, Quad & SNAP

Model	Switch Voltage	Current Cont/Surge	Logic Voltage
Backplanes Modules (Prefix G4, Q or SNAP for family)			
AC SSR modules, Colour Black			
OAC5	12-140VAC	3/80	5 VDC
OAC5A	24-280VAC	3/80	5 VDC
OAC5A5	24-280VAC	3/80	5 VDC (NC)
OAC15	12-140VAC	3/80	15 VDC
OAC15A	24-280VAC	3/80	15 VDC
OAC24	12-140VAC	3/80	24 VDC
OAC24A	24-280VAC	3/80	24 VDC
DC SSR modules, Colour Red			
ODC5	5-60 VDC	3/5	5 VDC
ODC5R	100DC/130AC	3/5	5 VDC (Relay)
ODC5A	5-200 VDC	1/5	5 VDC
ODC15	5-60 VDC	3/5	15 VDC
ODC15A	5-200 VDC	1/5	15 VDC
ODC24	5-60 VDC	3/5	24 VDC
ODC24A	5-200 VDC	1/5	24 VDC
DC Input Modules, Colour White (Note also AC Inputs)			
IDC5	10-32 VDC/AC	Level Shift to	5 VDC
IDC5B	4-16 VDC/AC	Level Shift to	5 VDC (Fast)
IDC5D	2.5-28 VDC/AC	Level Shift to	5 VDC
IDC5G	35-60 VDC/AC	Level Shift to	5 VDC
IDC15	10-32 VDC/AC	Level Shift to	15 VDC
IDC24	10-32 VDC/AC	Level Shift to	24 VDC
AC Input Modules, Colour Yellow			
IAC5	90-140 VAC	Level Shift to	5 VDC
IAC5A	180-280 VAC	Level Shift to	5 VDC
IAC15	90-140 VAC	Level Shift to	15 VDC
IAC15A	180-280 VAC	Level Shift to	15 VDC
IAC24	90-140 VAC	Level Shift to	24 VDC
IAC24A	180-280 VAC	Level Shift to	24 VDC

MasTec also has **power semiconductors**, diodes, bridges, rectifiers, resistors. For larger power projects our relays, contactors and SSR are available as single, bi or three phase units, up to 675 VAC and 100 + amps.



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