# GP750 PROGRAMMABLE INSTRUMENT

32X32 MEMS 3D MATRIX SWITCH PLUG-IN MODULE

DiCon's MEMS 3D Matrix Switch is a proprietary optical switch that allows any of the inputs to connect to any of the outputs in a non-blocking optical cross-connect configuration. This innovative design is based on arrays of DiCon's industry proven MEMS mirrors, which redirect light from the input fibers to the requested output fibers. For ease of control, this 3D Matrix Switch is provided as a Plug-In module for use in DiCon's GP750 modular system.

OPERATING PRINCIPLE
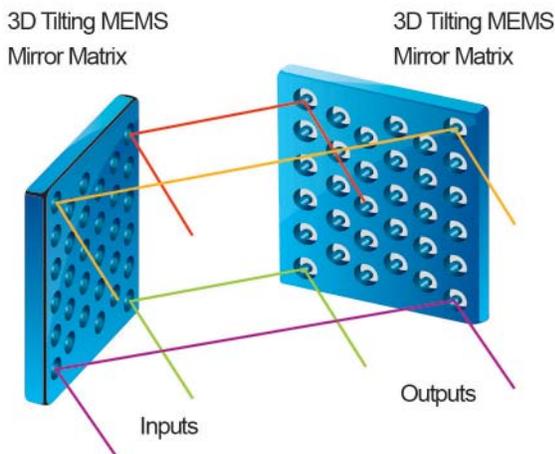
FEATURES

- Proven DiCon MEMS Mirror Technology
- Excellent Repeatability
- Compact Form Factor

APPLICATIONS

Matrix optical switches allow resources to be shared within R&D or Production labs, while also being reconfigurable to adapt to future changes.

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OPTICAL SPECIFICATIONS[1]

PARAMETER		RATING
Insertion Loss[2]	Single-Band	2.0 dB max.
	Dual-Band	2.2 dB max.
Crosstalk		-50 dB max.
Back Reflection		-45 dB max.
Switching Time		50 ms max.
TDL		0.4 dB max.
WDL[3]		0.4 dB max.
PDL		0.4 dB max.
Repeatability[4]		+/- 0.04 dB max.
Durability		10^9 cycles min.
Optical Power		500 mW max.
Fiber Type		9/125 μm single mode

1. Specifications are without connectors.
2. IL is measured at CWL, 23°C.
3. WDL is measured in a +/- 20 nm range at 23°C.
4. Repeatability is defined after 100 cycles.

MECHANICAL DIMENSIONS
(Units: mm)

152.0

165.0

350.0

146.0
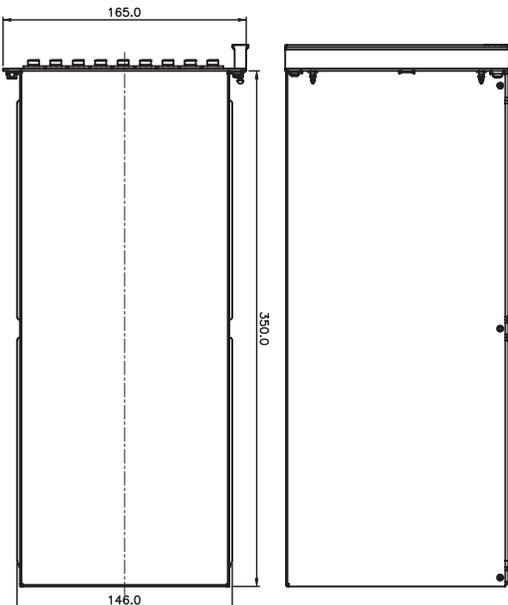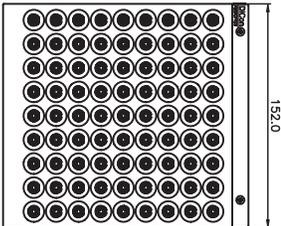
ORDERING INFORMATION

GPX - 4S - ☐ - ☐ - 9 - ☐

Product Code

GPX   Matrix Module

Slot Width

4S   4-Slot Module

Switch Configuration

MxN/3D   MxN, 3D Matrix, Non Blocking
    Specify M,N≤32
Available in any MxN size up to a maximum of 32x32

Wavelength Range

13	1290 - 1330 nm
15	1530 - 1570 nm
16	1570 - 1610 nm
13/15	1290 - 1330 & 1530 - 1570 nm
15/16	1530 - 1570 & 1570 - 1610 nm

Fiber and Jacket Type

9   Corning SMF-28 9µm fiber
Or other equivalent 9µm Singlemode fiber

Connector Type

FC/SPC	FC/SPC
FC/APC	FC/APC
N	NONE

Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

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