

The SW516119-PXI Switching Modules – Reconfigurable Modular Solutions

The PXI family offers three modules with different RF coaxial switch configurations: Dual SPDT, DPDT, SP3T, SP4T, SP6T, 4x4 or 2x5. Depending on the model, the PXI solutions operate either between DC -18 GHz or between DC - 26.5 GHz. Model 12K3S offers the user the flexibility to combine up to three different switches in one single model and by removing external RF cables on Model 14F32-1/4x4, the user can reconfigure the unit to terminated (e.g. SPDT or SP3T) switches.

Additional Hardware

National Instrument PXI chassis (PXI-1036 or similar) is required.

Software

Each switch can be controlled via LabVIEW, LabWindows, or Visual Basic Graphical User Interface. Also, the modules are VISA and IVI compatible and no additional drivers are needed.

Application

Automatic Test Equipment (ATE) for in-lab testing or large scale signal routing and multiplexing.



* Software delays are not taken into account

In Focus: SW516119-12K3S-Series

Electrical Specifications

Operating Frequencies	DC to 26.5 GHz	Characteristic Impedance	50 Ω
VSWR	1.25 @ DC to 4 GHz 1.35 @ 4 to 8 GHz 1.40 @ 8 to 12 GHz 1.50 @ 12 to 18 GHz 1.80 @ 18 to 26.5 GHz	Insertion Loss	0.2 dB @ DC to 4 GHz 0.3 dB @ 4 to 8 GHz 0.4 dB @ 8 to 12 GHz 0.5 dB @ 12 to 18 GHz 0.8 dB @ 18 to 26.5 GHz
Open Channel Isolation	70 dB @ DC to 4 GHz 65 dB @ 4 to 8 GHz 60 dB @ 8 to 12 GHz 60 dB @ 12 to 18 GHz 50 dB @ 18 to 26.5 GHz	RF CW Power	100 W @ DC to 4 GHz 70 W @ 4 to 8 GHz 60 W @ 8 to 12 GHz 60 W @ 12 to 18 GHz 30 W @ 18 to 26.5 GHz
Power Consumption Backplane Supply	+12 VDC	Random Vibration	Operating: 5 to 500 Hz @ 0.3 grms Nonoperating: 5 to 500 Hz @ 2.4 grms
Switching Speed (max)	20 ms (max)	Actuator Current	1A
Contact Material	Beryllium copper,gold-plated	RF Connectors	SMA (F)
Operating Life	1 Million Cycles (cold switching)	Dimensions	2-slot,3U,PXI/PCI module
Operating Temperature	0 to +50°C	Relay Type	Electromechanical
Storage Temperature	-20 to +70 °C	Operational Shock	30 g peak,half-sine,11 ms pulse
Relative Humidity	5% to 85% (non-condensing)		

Command and Control

Software

The PXI card is supplied with an IVI compliant driver providing complete functionality for the matrix module. The driver supports the following Windows platforms: 98/2000/XP.

PXI Interface

The PXI Card complies with the PXI Specification 2.1.

Trigger Bus, Star Trigger, Interrupts, and Local Bus are not implemented.

Recommended Software

LabVIEW
LabWindows
Visual Basic
C/C++

Molex reserves the right to change this Datasheet without notice!For special requirements,pls inquiry.