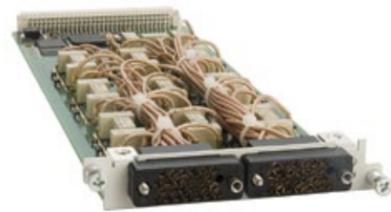


DATA SHEET



EX1200-6216

DUAL (1X16) 50 W RF MULTIPLEXERS, 1 GHZ

FEATURES

High-density dual (1 x 16) RF multiplexer trees, 1 GHz bandwidth

Suitable for switching RF signals to/from high bandwidth measurement devices such as oscilloscopes and function generators

Coax shields are isolated from system ground to minimize ground loop effects

50 W maximum switching power

No unterminated stub effects ensure maximum signal fidelity-state multiplexer, up to 288 2-wire



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RELIABLE DATA FIRST TIME EVERY TIME

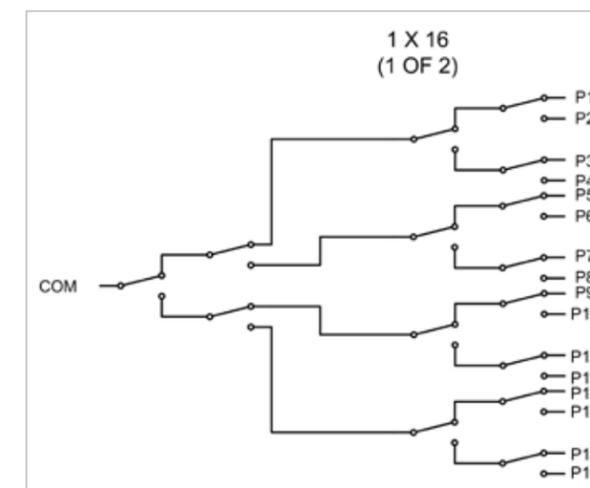
OVERVIEW

The EX1200-6216 is a high-density RF switch module configured as dual 1 x 16 coaxial trees that are isolated from each other and system ground to provide a high-fidelity switch path for switching signals in excess of 1 GHz in a 50 Ω environment. On-board jumpers can be added to connect all shields together or to system ground if desired. Excellent crosstalk and isolation is maintained by using very short low-loss coaxial runs from the connector directly to the relays.

All modules are also configured to avoid any unterminated stub effects. This improves overall signal integrity and allows for high frequency matrix designs or large multiplexer configurations while preserving bandwidth and maintaining low VSWR. The front panel utilizes two high-density, 26-pin coaxial connectors designed for high reliability and low insertion loss.

Six of the modules can be accommodated in a single EX1200 full rack mainframe to provide a very flexible RF switch network. The modules can also be combined with other EX1200 switch cards to configure a general purpose subsystem to switch dc to > 1 GHz.

BLOCK DIAGRAM



RELIABLE DATA FIRST TIME EVERY TIME

General Specifications

CHANNEL COUNT	Dual (1 x 16) 50 Ω RF multiplexers, 1 GHz
RELAY TYPE	Electromechanical, fail-safe
MAXIMUM SWITCHING VOLTAGE	220 V DC, 250 V AC rms
MAXIMUM SWITCHING CURRENT	2 A
MAXIMUM SWITCHING POWER	50 W, 62.5 VA
RATED SWITCH OPERATIONS	
Mechanical	5 x 10 ⁶
Electrical	1 x 10 ⁵ at full load
SWITCHING TIME	< 5 ms
PATH RESISTANCE	< 500 mΩ
INSULATION RESISTANCE	> 1 X 10 ⁹ Ω
BANDWIDTH (-3 dB)	1 GHz (typical)
INSERTION LOSS (TYPICAL)	
500 MHz	< 1.0 dB
1.3 GHz	< 3.0 dB
CROSSTALK (TYPICAL)	
500 MHz	< -75 dB
1.3 GHz	< -70 dB
ISOLATION (TYPICAL)	
500 MHz	< -75 dB
1.3 GHz	< -70 dB
VSWR (TYPICAL)	
500 MHz	< 1.4:1
1.3 GHz	< 2.5:1
CONNECTOR TYPE	Dual 26-pin

Ordering Information

EX1200-6216	Dual (1x16) 50 W RF multiplexers, 1 GHz
ACCESSORIES AND TOOLS	
70-0150-000	26-pin mating connector and housing (2 required)
70-0149-000	10-pin/ferrule kit (RG 316 50 Ω)
70-0149-001	10-pin/ferrule kit (RG 178 50 Ω)
46-0018-000	Crimp tool, coax RG316 (50 Ω)
46-0018-001	Crimp tool, coax RG178 (50 Ω)
46-0021-000	Tool, pin extractor, size 16 contact, AMP M series