

MODEL 4501

ASCOR Model 4501 Switches



Features

Bandwidth Performance:

- 3-pole Star switches: >800 MHz
- 4-pole Star switches: >475 MHz
- Star switching through matrix: >25 MHz
- 3-pole to 4-pole paths: >275 MHz



4000 Series Multi-Slot Carrier



A Giga-tronics Company

**ASCOR Is The One Switch Source For
Multiple Switching Solutions.**

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ASCOR Model 4501 Switches

Traditionally ATE systems have been designed using switching components wired together to form a system switch. This is especially true of VXI switch modules that are combined through external wiring components. The instrumentation then requires additional wiring to be integrated into this maze of switches. The biggest drawbacks to this approach are the loss of performance due to mismatched impedance, signal losses due to long cables and higher resistive, capacitive or inductive loads due to poor wiring design. It is always ideal to design a good switch system to minimize cabling and match impedances.

ASCOR has designed a new family of switches that does just that using the existing 4000 series multi-slot carrier. Replacing the traditional VXI card front panel with a standard Virginia Panel TAC connector allows the Device Interface Board (DIB) to mate directly to the 4500 Series switch card. Test engineers no longer need to install a custom cable assembly between the individual switch-card front panels and the DIB interface. The 4500 Series ensures test signal integrity by shielding all signal connections starting from the internal switch assemblies through impedance matched transmission lines to the TAC connector interface. The standardized interfaces allow convenient card removal from the front for rapid maintenance and configuration changes.

Providing high density, high signal integrity connections to the test device has become the principle test system design challenge. The 4500 Series eliminates the custom cabling 'funnels', which were re-engineered for every test system thereby improving the customer's time-to-market and test design cycle-time while simultaneously reducing design risks and test system costs in construction, software development and configuration management.

Signal Guard is a 600MHz analog bus interface connecting all Ascort 4500 Series VXI cards. Shielded transmission lines and relays ensure high signal integrity by preventing noise ingress and crosstalk within the switching system. Impedance matched transmission lines minimize the effects of internal, high frequency signal reflections. No custom cabling is required between the switch cards. Signal Guard

also eliminates customized cabling between switches and instrumentation. Signal Guard's high bandwidth, modular interface saves engineering time and avoids the risk of cabling problems degrading effective instrumentation performance.

The Ascort 4000 Series Switching System also simplifies software design, coding and driver interface tasks. The 4000 Series cards assemble into a carrier cage prior to insertion in the VXI chassis. The carrier's backplane interface allows the entire switching system to connect with a single VXI address. Software developers no longer need account for the highly variable effects of multiple switch addresses, multiple driver interfaces, multiple card-to-card switch interconnections, variable path settling times, multiple device interface variations and configuration dependent query/error tracking functions.

All Ascort 4000 Series switch products are register-based devices and are supplied with software drivers for LabVIEW, LabWindowsCVi, C, C++, and Visual Basic. Ascort's VXI cards conform to European standards for CE marking. Ascort is the one switch source for multiple switching solutions.

Model 4501

The Model 4501 is a very high performance coaxial switch. It has bandwidths exceeding 800MHz. It has eight 3-pole coaxial star switches combined with two 4-pole coaxial star and two 5-pole coaxial star switches. These are linked together and joined into a 7 by 10 matrix.

The matrix provides 10 analog bus connections to the Series 4000 Signal Guard analog back plane. This module is used to switch various high bandwidths instruments as well as a DMM to connect to the interface connector while maintaining maximum bandwidth. High bandwidths oscilloscope can be connected to the interface at bandwidths greater than 500Mhz. The instruments can be connected directly to the interface or routed through the matrix in order to reach another switch module.

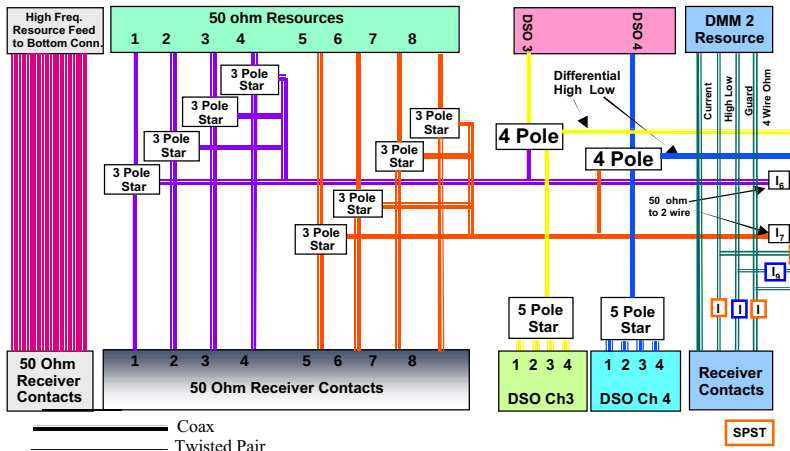
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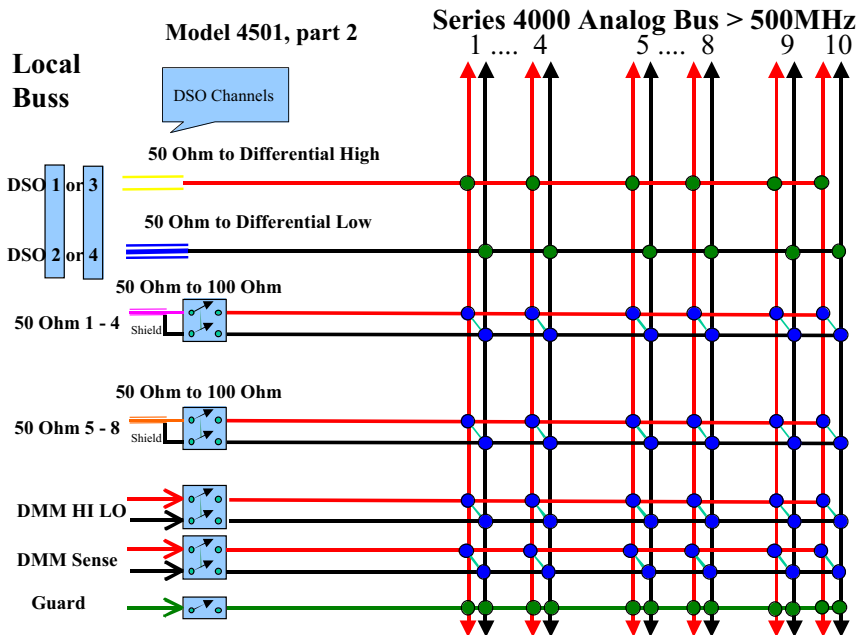
Switches

S P E C I F I C A T I O N S

Model 4501 Switching 50 Ohm Resource Card



Plus 10 feedthroughs to Bottom Resource Connector



Custom Solutions Through Engineering Innovation

ASCOR, founded in 1987 and headquartered in California's Silicon Valley, provides a complete line of VXI Switching and Digital Modules for industrial, medical, scientific and governmental automatic test applications. Ascort VXI products are the quietest, cleanest, highest density VXI modules commercially available.



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Summary For 4500 Family

- Optimum system configuration switching
- Maximum perform far exceed standard VXI designs
- Coaxial, single wire, dual wire, twisted pair switching
- Integrated with built-in adapter to Virginia Panel Receiver Mechanism
- Controlled Impedance
- Shielded and floating analog ground utilized.
- Dual VXI chassis with mechanism available