

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Astronics / Giga-tronics / Ascor 3000-12* at our website: ***Click HERE***

3000 Series™

VXI MODULES



VXI plug&play

ASCOR INCORPORATED
A Giga-tronics Company

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

3000 Series™



General Purpose Switch Modules

Most VXI test environments require general purpose switching capabilities to enable and disable particular I/O circuits, especially during fault analysis routines and subroutines. ASCOR general purpose switch modules are ideal for low frequency switching and power switching applications. These VXI Switching Modules are tailored for maximum flexibility for system integration. The modules are all C-size with up to 96 SPST Form A relays rated at 5 amps 250 VAC, as well as 48 SPST relays rated at 10 amps 250 VAC or 48 SPDT relays rated at 5 amps 277 VAC, each meeting requirements for high current switching in ATE systems. They are the industry's highest density general purpose switches and include Models 3000-2, 3000-12, 3000-42, 3000-43 and 3000-53/53A.

Shielded Relay Scanner & Matrix Modules

ASCOR's shielded relay scanners, such as the Model 3000-3 and 3000-8, are ideal for general scanning purposes, including Digital Multi-Meters (DMMs). Using shielded relays in scanner or multiplexer applications where there are a large number of channels will provide excellent signal isolation and low crosstalk characteristics. Channels are



individually controlled for maximum versatility. When using shielded relays, ASCOR coaxially ties the relay shields to a separate analog ground plane in order to ensure minimal crosstalk and signal interference.

The switch matrix modules are available from combinations of 2x128 single-wire (3000-34) to 2x128 (3000-44), 4x64 two-wire (3000-45) and 8x32 two-wire (3000-47). Bandwidths range from a low of >40 MHz to a high of >90MHz ensuring a low noise environment. If crosstalk is not a major concern, most of the shielded modules are also available with non-shielded relays.



High Frequency Shielded Coax Switches

ASCOR offers a variety of High Frequency Coax Switches. All of the Coax Switch VXI modules use internally cabled switch path at 50 ohms. Also available upon request is a 75 ohm switch path. The ASCOR Coax Switches include matrices from 2x32 at >350 MHz for the worst path (3000-5) to 1x8 multiplexers at >500 MHz (3000-32). These switch modules are ideal for use with oscilloscopes, frequency counters and other instruments that require clean coax signals.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

SERIES 3000 VXI MODULES



Microwave & RF Switch Modules

ASCOR builds numerous RF and microwave VXI modules. Our RF modules start with the Model 3000-54 (12 1x4s at >1.3 GHz) and extend through our newest 3000-515 (16x12 RF Matrix at >900 MHz for the worst path). The 3000-55 is also available as a dual 4x4 matrix, the 3000-55A.

Our microwave switches are provided with ASCOR's unique "pluggable" capability designed to ensure maximum flexibility in switch selection and minimal (Mean Time To Repair) MTTR in the event a switch needs to be changed or replaced. Available in two-wide VXI modules and three-wide VXI modules, the 3000-200s are available in either DC to 18 GHz or DC to 26 GHz performance specs as well as self-terminated versions.

Special Modules

In addition to our switch modules, ASCOR offers a number of "special" modules designed to meet the ever demanding requirements of our customers, from the Model 3000-4 relay driver module (128 general purpose 5, 12 or 24 volt coil drivers) to the 3000-62 with its optional mix of up to 256



TTL I/O, CMOS, Differential and Open Collector Drivers in a single VXI slot. ASCOR also offers special VXI modules such as the 3000-46, that supports both digital and analog signal switching, and the 3000-39, that is capable of supporting a high level of I-level or intermediate level switching. (Please read ASCOR write-up entitled "Programming VXI Switching").

ASCOR also designs and manufactures custom and semi-custom VXI modules for a number of special customer-defined applications. Feel free to contact ASCOR if you have a special VXI requirement.

All ASCOR standard VXI modules include VXIplug&play drivers written in C++ using LabWindows CVi and operating under WIN95 or WINNT. All ASCOR VXI modules are Register-based and include VXIMAX 16/32, ASCOR's exclusive capability to operate our VXI modules in either 16-bit or 32-bit data paths.



VXI DMM With M-Module

The ASCOR Model 3801 is a one wide, C-size VXI card which comes standard with a Digital Multimeter (DMM) and the capability of adding an industry standard M-Module mezzanine card.

The on-board 6 3/4 digit DMM is a high performance Digital Multimeter optimized for a variety of applications such as automated production testing, control and data acquisition, portable field testing, laboratory automation, disk drive testing and resistance network testing.

There are two types of DMMs available with the Model 3801. The standard DMM provides the following measurement capabilities:

- DC Volts and Current
- AC Volts and Current
- Resistance: 2-Wire and 4-Wire

Each function provides at least four ranges of values. Accuracy on the DC Volts and on the Resistance functions is better than 0.0004%. The extended capability DMM (DMM / LCR) provides for all the functions listed above for the standard DMM. In addition the DMM / LCR provides the following additions capabilities:

- Resistance: 6-Wire Guarded
- Temperature: -150° C to +650° C
- Leakage Current: 1nA to 3300nA
- Capacitance: 1nF to 10 mF
- Inductance: 1uH to 3.3H
- Peak to Peak, Crest & Median Volts
- Timing Functions: AC / DC Voltage & Current Sourcing
- DCV Source: -10.0V to +10.0V
- ACV Source: 0v to 20V P to P
- DC Current: 1.25uA to 12.5mA

The 3801 also has the capability of mounting a single industry standard M-Module mezzanine card. These units provide functions like Analog to Digital Conversion (A / D), Digital to Analog Conversion (A / D), Universal Timer / Counter (UTC). Any industry standard M-Module may be used. M-Modules provided by ASCOR come complete with a software driver provided. Other M-Modules not provided by ASCOR Inc. will require the user to provide their own software driver.

As with all ASCOR VXI Modules, The Model 3801 is a register-based device. The software drivers that are provided are written using Lab Windows CVi and are written in C++.



System Integration

In addition to the multitude of VXI modules, ASCOR offers System Integration services to our customers. These services capitalize on our “transmission line” expertise and are designed to ensure that all signals within a test station reach the proper instrument or unit under test (UUT) with unparalleled fidelity and integrity. The test station is only as good as the integrity of the signals that it uses to stimulate and measure the response. The degree of care with which ASCOR builds applicable wiring harnesses ensures overall system performance, normally well in excess of minimum specification.

While we leave the test application software to the end user or Test Program Set (TPS) developer, ASCOR should be considered for tying all of your selected instruments, switches, interface adapters and UUTs together to provide the most reliable and yet, cost efficient system packaging available. By using our electrical engineering and mechanical engineering expertise, you gain a significant advantage in achieving a comprehensive system design while leaving your own staff time to complete its projects in a timely manner.

Call Us Today At:
510.490.2300

Visit Our Website At:
www.ascor-inc.com

Or Email ASCOR At:
sales@ascor-inc.com

ASCOR
INCORPORATED
A Giga-tronics Company

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Series 3000 VXI Modules

Model No.	Description	Current Rating	Crosstalk / Voltage	Bandwidth / Switching Power	Insertion Loss
General Purpose Switch Modules					
3000-2	96 SPST relays rated @ 5 Amps (individually wired)	5 Amps	250VAC		
3000-12	32 DPDT relays rated @ 2 Amps	2 Amps	-80dB @ 300 KHz	>55 MHz @ -3dB	
3000-42	48 SPDT relays rated @ 5 Amps	5 Amps	-62dB @ 1 MHz	>50 MHz @ -3dB	<-0.7dB @ 30 MHz
3000-43	48 SPDT 10 Amp relays (individually wired)	10 Amps	250 VAC	2000 VA	
3000-53	96 Form C relays rated @ 1 Amp	2 Amp	220 VDC	60 W	
3000-4357	32 SPDT, 5A Switches	Replacement for Tektronix VX4357			
3000-4351	40 SPDT, 10A Switches	Replacement for Tektronix VX4351			
3000-A308	80 OC Relay Drivers	Replacement for Tektronix 73A308			
3000-4353	32 SPST, 5A Switches	Replacement for Tektronix VX4253			
3000-4320	RF Switch, 8(1x4), 1.3GHz	Replacement for Tektronix VX4320			
Shielded Relay Scanner & Matrix Modules					
3000-3	High Density Switch Multiplexer 120x1	1 Amp	-50dB @ 10 MHz	>35 MHz @ -3dB	Reconfigurable to multiple 30x1s
3000-8	Up to 240x1 Single Wire Multiplexer	1 Amp	-50dB @ 10 MHz	>40 MHz @ -3dB	
3000-9	High Density Switch Multiplexer 480x1 Single Wire	1 Amp	-50dB @ 10 MHz	>40 MHz @ -3dB	
3000-34	GP Switch Matrix 2x128 Single-Wire	1 Amp		>40 MHz @ -3dB	
3000-44	GP Switch Matrix 2x128 2-Wire	0.5 Amp	-40dB @ 50 MHz	>45 MHz @ -3dB	-1dB @ 30 MHz
3000-45	GP Switch Matrix 4x64 2 -Wire	0.5 Amp	-40dB @ 50 MHz	>70 MHz @ -3dB	
3000-46	GP Flex Switch – Mixed Signals	0.5 Amp		>175 MHz@ -3dB	
3000-47	GP 8x32 Switch Matrix 2-Wire	0.5 Amp	-42dB @ 100 MHz	>90 MHz @-3dB	
3000-52	GP 8x32 Switch Matrix 2-Wire (Unshielded Relays)	2 Amps	-52dB @ 50 MHz	>50 MHz @ -3dB	
3000-57	GP 4x64 Matrix 2-Wire (Unshielded Relays)	2 Amps	-52dB @ 50 MHz	>40 MHz @ -3dB	
High Frequency Coax Switches					
3000-5	High Frequency Coaxial Switch Matrix 36x2	0.5 Amp	-50dB @ 100 MHz	>350 MHz @ -3dB	-1dB @ 175 MHz
3000-6	High Frequency Coaxial Switch Matrix 18x2	0.5 Amp	-50dB @ 100 MHz	>350 MHz @ -3dB	-1dB @ 175 MHz
3000-30	Single Slot High Performance Coaxial Switch Matrix	1 Amp	-50dB @ 100 MHz	>550 MHz @ -3dB	-1dB @ 50 MHz
3000-32	Variable Coax Multiplexer Switch	1 Amp	-50dB @ 100 MHz	>900 MHz @ -3dB	-1dB @ 50 MHz
3000-39	Universal I / O Switch Module	0.5 Amp	-50dB @ 100 KHz	>700 MHz @ -3dB	

Series 3000 VXI Modules

Model No.	Description	Current Rating	Crosstalk / Voltage	Bandwidth / Switching Power	Insertion Loss
Microwave & RF Switch Modules					
3000-54	RF Switch Module DC to 1.8 GHz	1 Amp	-37dB @ 1.3 GHz		<-1.2dB @ 1.3 GHz
3000-55	Single / Dual 4x4 Matrix Module	1 Amp	-35dB @ 1.3 GHz		<-2.8dB @ 1.3 GHz
3000-2xx	Microwave Switch Family	2W to 15W	DC to 26 GHz	-60dB @ 18 GHz	<-0.5dB @ 18 GHz
Special Modules					
3000-4	Relay & SSR Driver Module	128 General Purpose 0.5 Amp open collector drivers			
3000-16	Guardian - VXI Alert Status Monitor	Monitors up to 24 different indicators including VXI power supplies, watchdog timer, temperature, air flow etc.			
3000-27	Multi-Channel Programmable Resistor	10 channels of programmable resistors, each channel programmable in 20 ohm steps up to 1.3 megaohms			
3000-41	64 Channels of Edge Detection w/ Time Stamping	1 microsecond resolution on edge to edge measurement. Supports VXI interrupts			
3000-48	16 Programmable High Power Drivers	4 Programmable timers each supporting 4 drivers. Each driver can support 4 Amps @ 50 Volts			
3000-62	128 TTL I / O Compatible Driver	128 TTL I / O latched tri-state drivers			
3000-62	Option 1	Additional 128 TTL drivers			
3000-62	Option 2	Additional 32 channels of CMOS, 32 channels of differential and 32 channels of open collector drivers			
3000-62	Option 3	Additional 64 channels of differential drivers			
3000-62	Option 4	Additional 128 high current open collector drivers and 16 TTL drivers			
3801-1004	Std. VXI DMM with M-Module	VXI DMM-AD / DC Voltage, Current, 2 and 4 Wire Resistance. The 3801 also can add an industry standard M-Module to the Module.			
3801-1005	VXI DMM / LCR with M-Module	Same basic capabilities as the 3801-1004 with the additional features of Inductance, Capacitance, & t wire Resistance measurements. Also Temperature, Leakage, Peak-to Peak-Crest-& Median measurements, Timing Functions and AC / DC Voltage & Current Sourcing. The 3801 also can add an industry standard M-Module to the M Nodule.			
3802-1004	Std VXI DMM only	Same as 3801-1004 but without the M-Module capability			
3802-1005	VXI DMM / LCR only	Same as 3801-1005 but without the M-Module capability			

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

Environmental Specifications

- Temperature
  - Operating 0°C to 55°C
  - Storage -40° to 75°C
- Relative Humidity
  - Operating 10 to 90% Non-condensing
  - Storage 0 to 95% Non-condensing

CE The CE Mark indicates that the product(s) have completed and passed rigorous testing in the area of RF Emissions, Immunity to Electromagnetic Disturbances and that the product(s) comply with the European electrical safety standards.

ASCOR INCORPORATED
A Giga-tronics Company

4384 Enterprise Place, Fremont, CA 94538
Telephone: (510)490-2300, Fax: (510)490-8493

Visit Our Website At:
www.ascor-inc.com

©2002 ASCOR Incorporated. Specifications subject to change without notice. 9/02

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP