## RACAL INSTRUMENTS



# Switch Solutions 

The only test system you want
is the one that's made for you.

## About Us

Racal Instruments produced the world's first compact electronic frequency counter in the late 1950's, launching a broad line of instrument products for which Racal is still renowned. Since then Racal has led the way in several product areas: general purpose test equipment, automatic test equipment, VXIbus modules, communication test sets, laser diode and photonics test systems and burn-in stations, chassis, switching, and, most recently, turnkey system integration.
The global Automatic Test Equipment market continues to grow at an accelerating rate, and Racal Instruments remains at the forefront with the technology, engineering, products and system integration services to support the industry's most demanding customer needs. We are the leading integrators of test systems for communications, broadband, military and industrial customers. Some of the numerous application solutions developed by Racal include laser diode burn-in, jet engine testers, automotive testing, digital communications and radar simulators.

The backbone of Racal Instruments' success relies heavily on the strength of our Engineering resources. Our company is committed to Engineering innovation and continues to apply the appropriate technology in our customer-centric system solutions. We back our Engineering resources with a corporate-wide concern for quality that begins with design and continues through the manufacturing, field installation, and support processes.
Our excellence in quality was recently recognized by Intel. We earned their coveted SCQI (Supplier Continuous Quality Improvement) award for the second consecutive year, a first for any test instrument company. We did it for Intel; let us prove what we can do for you.

## Why Switching Solutions from Racal

Today's system design engineers face a common problem: With so many switch suppliers and switch types to choose from, just how do you select the right one? Fortunately there is an easy one-stop solution, Racal Instruments. Racal has been designing accurate, reliable, flexible, and user friendly switch solutions since 1978. Our engineers constantly seek to maximize performance and reliability by incorporating new techniques, technology, and manufacturing practices to create the most practical, reliable, and precise instruments for your unique application. We continue to push switching technology with higher speeds, higher densities, and lower costs. Racal is the first and only choice for design engineers in automatic test equipment.

Racal's Technology Drives Down Your Costs for Switching!

| Series | 1200 | 1250 | 1255 | 1256 |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 50 \text { Ch } \\ \text { MUX: } \\ \$ 130 / c h \end{gathered}$ | 100 Ch <br> MUX: <br> \$88/ch | 384 Ch MUX: $\$ 32 / \mathrm{ch}$ | 512 Ch MUX: $\$ 20 / \mathrm{ch}$ |
| Year | 1978 | 1982 | 1995 | 2001 |

# Switching Systems 



## 1256 Switching System

- Ethernet/GPIB/RS-232 Remote Interface
- Front-Panel Controls
- Wide Range of Switching and Digital I/O Plug-Ins
- Low Cost
- High Throughput and Advanced Features for Reduced Test Time
- SCPI Command Set
- LabVIEW and LabWindows/CVI Drivers

The $\mathbf{1 2 5 6}$ switching system is a high-performance switching and control system in a compact 2 U rack mountable package. It controls up to eight (8) Adapt-a-Switch ${ }^{\circledR}$ plug-ins for switching and digital I/O. These plug-ins provide a wide range of switching capability: high current to 13 A , high voltage to 1 kV , RF/Microwave to 18 GHz , and even digital I/O with 96 channels per plug-in. The user can easily configure these plug-ins into a high-performance, low-cost solution to satisfy any switch applications. A single 1256 can accommodate any one of the following configurations, as well as countless others: 1152-point matrix, 512-channel scanner/multiplexer, 640 SPST switches, 768 channels of TTL, CMOS, or open-collector digital I/O.

The highly intuitive menu-driven interface provides easy access to all relay and digital I/O states, system preferences, and the nonvolatile memory features of the 1256 switching system. The GPIB and RS- 232 remote interfaces, which are IEEE 488.2 and SCPI compliant, provide any terminal or computer with access to all standard features. In addition, the remote interfaces can access advanced features: Path Level Switching, Include Lists, Exclude Lists, Scan List, Trigger Delays, Switch Mode, and Confidence Mode.

## 1257 Configurable Switching System

- Ideal Platform for Optical, RF, Microwave, and Hybrid Systems
- Ethernet/GPIB/RS-232 Remote Interface with SCPI Compliant Command Set
- Flexible Rack-Mount, 4U, 5U, or 6U Version
- Intuitive Front-Panel Control
- Detachable Rear Pull-Out Drawer for Rapid Bench Serviceability
- Removable Top and Bottom Covers for Easy In-Service Troubleshooting and Component Replacements
The Model $\mathbf{1 2 5 7}$ switching system is a high-performance switching and controls system designed specifically for applications such as automated testing of mobile radios, wireless phones, pagers, antennas, RF components, optical components, industrial and medical wireless products. This switching system makes it easier than ever to specify, order, install and commission a switch assembly based on your requirements and specifications.
The 1257 provides significant control capabilities. Each system can control up to 240 TTL/CMOS and/or 2A open-drain channels. When paired with its spacious drawer size, this makes the 1257 ideal for housing and controlling the most demanding and space intensive applications. The nonvolatile memory stores up to 100 complete system switch states as well as user preferences like RS232 baud rates, GPIB address, and display settings.
The 1257 incorporates fully removable bottom and top covers that, when used in conjunction with rack-mount slides, allow in-service troubleshooting and component replacement. Providing additional flexibility, every 1257 switching configuration is built on a removable drawer. This allows easy bench service and supports equipment sparing for critical applications.





## 1255A Switching System

- GPIB/RS-232 Control
- DC to Light

The 1255A high-performance switch system takes advantage of the density offered by full-size, 1260 series, switch modules and offers the capability of system expansion. This affordable system offers modules for applications ranging from DC to light, including RF/Microwave, digital, optical, signal, matrix, multiplexer and power. The system comes complete with both an internal IEEE-STD-488 and an RS-232 interface. The VXIplugeplay compliant drivers make it an easy addition to any system.

## Adapt-a-Switch ${ }^{\circledR}$ Plug-in Switch Cards

Featuring unprecedented density and flexibility to suit your switching requirements, Adapt-a-Switch ${ }^{\circledR}$ plug-ins can be used with the Model 1256, GPIB/RS-232 Switching System, or with the Models $\mathbf{1 2 6 0 - 1 0 0}$ and 1260-101, VXIbus carriers. Switching solutions include RF, microwave, signal, matrix, and multiplexer as well as power and discrete.
When the plug-in switch cards are used with the 1260-100 or the 1260-101 Adapt-a-Switch ${ }^{\circledR}$ carrier, an Option 01T interface is required. This interface is housed in the carrier and can control twelve plug-in cards. This option additionally provides message-based operation for ease-of-use and register-based operation for maximum speeds. When used with the 1256 mainframe, no additional controller is required.

The Adapt-a-Switch series includes VXIplugeplay support for WIN95/98/ME/NT/2000/XP frameworks, including drivers for LabWindows/CVI and LabVIEW.


## Adapt-a-Switch Plug-in Series Selection Guide for Model 1256 and Model 1260-100

| Signal Type | Model No. | Configuration Ө Max Spec. Ranges | Connection Type/Comments |
| :---: | :---: | :---: | :---: |
| Digital Test | 1260-114TTL | 96 Discrete I/O, TTL, $5.5 \mathrm{~V}, 15 \mathrm{~mA}$ source/24 mA sink, $120 \mathrm{~mW}, 200 \mathrm{kHz}$ | 160-pin DIN (Not Supplied) |
|  | 1260-114CMOS | 96 Discrete I/O, CMOS, 5.5 V, 8 mA source/sink, $40 \mathrm{~mW}, 200 \mathrm{kHz}$ |  |
|  | 1260-1140C | 96 Discrete I/O, Open Collector, $32 \mathrm{~V}, 200 \mathrm{~mA}$ sink, 6.4 W, 200 kHz |  |
|  | 1260-114HVOC | 48 Discrete I/O, High Voltage Open Collector, 50 V, 1.5 A sink, $75 \mathrm{~W}, 200 \mathrm{kHz}$ |  |
| General Purpose | 1260-111 | 12-Ch Form A and Form B SPST, 1 kVDC/VAC, 2 ADC/AAC, $60 \mathrm{~W} / 60 \mathrm{VA}, 60 \mathrm{MHz}$ | 48-pin DIN (Not Supplied) |
|  | 1260-111A | 12-Ch SPDT, 1 kVDC/VAC, 2 ADC/AAC, $60 \mathrm{~W} / 60 \mathrm{VA}, 60 \mathrm{MHz}$ |  |
|  | 1260-112 | 20-Ch DPDT, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC/AAC}, 60 \mathrm{~W} / 125 \mathrm{VA}, 120 \mathrm{MHz}$ | 160-pin DIN (Not Supplied) |
|  | 1260-117 | 52-Ch SPDT, 220 VDC/250 VAC, 2 ADC/AAC, $60 \mathrm{~W} / 125 \mathrm{VA}, 60 \mathrm{MHz}$ |  |
|  | 1260-118 | $80-\mathrm{Ch}$ SPST, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 125 \mathrm{VA}, 100 \mathrm{MHz}$ |  |
| Multiplexers | 1260-131A | 10-Ch SP4T, $220 \mathrm{VDC/250} \mathrm{VAC}$,1 ADC/AAC, $30 \mathrm{~W} / 125 \mathrm{VA}, 200 \mathrm{MHz}$ | IDC |
|  | 1260-131B | $26-\mathrm{Ch}$ SP4T, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 125 \mathrm{VA}, 200 \mathrm{MHz}$ | 160-pin DIN (Not Supplied) |
|  | 1260-132 | $1 \mathrm{x} 23,1 \mathrm{kVDC/VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 60 \mathrm{VA}, 5 \mathrm{MHz}$ | 48-pin DIN (Not Supplied) |
|  | 1260-134 | $16(1 \times 4), 220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 125 \mathrm{VA}, 100 \mathrm{MHz}$ | 160-pin DIN (Not Supplied) |
|  | 1260-136B | $2(1 \times 21)$ or $1 \times 42,500 \mathrm{VDC} / \mathrm{VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W} / \mathrm{VA}$, reed relay | 48-pin DIN (Not Supplied) |
|  | 1260-136C | 2(1x21) or 1x42, $1000 \mathrm{VDC} / \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 25 \mathrm{~W} / \mathrm{VA}$, reed relay |  |
|  | 1260-136D | 2 (1x21) or 1x42, $500 \mathrm{VDC} / \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 50 \mathrm{~W} / \mathrm{VA}$, mercury-wetted |  |
|  | 1260-138A | $8(1 \mathrm{x} 8), 220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 125 \mathrm{VA},>85 \mathrm{MHz}(1 \mathrm{x} 8) />4 \mathrm{MHz}$ ( 1 x 64 ) | 160-pin DIN (Not Supplied) |
| Matrix | 1260-145A | 9(4x4), $60 \mathrm{VDC/} 125 \mathrm{VAC}, 1 \mathrm{~A} @ 30 \mathrm{VDC/} .3 \mathrm{~A} @ 125 \mathrm{VAC}, 30 \mathrm{~W} / 37.5 \mathrm{VA}, 42 \mathrm{MHz}$ | 160-pin DIN (Not Supplied), Uses $4 \times 4$ sub-module to configure matrix |
|  | 1260-145B | 3 (4x12), 60 VDC/ 125 VAC, 1 A @ 30 VDC/. 3 A @ 125 VAC, 30 W/37.5 VA, 31 MHz |  |
|  | 1260-145C | $2(4 x 16), 60 \mathrm{VDC} / 125 \mathrm{VAC}, 1 \mathrm{~A} @ 30 \mathrm{VDC} / 3 \mathrm{~A} @ 125 \mathrm{VAC}, 30 \mathrm{~W} / 37.5 \mathrm{VA}, 24 \mathrm{MHz}$ |  |
|  | 1260-145D | $4 \times 36,60 \mathrm{VDC} / 125 \mathrm{VAC}, 1 \mathrm{~A} @ 30 \mathrm{VDC} / .3$ A @ $125 \mathrm{VAC}, 30 \mathrm{~W} / 37.5 \mathrm{VA}, 13 \mathrm{MHz}$ |  |
|  | 1260-145E | 2(8x8), $60 \mathrm{VDC/} 125 \mathrm{VAC}, 1 \mathrm{~A} @ 30 \mathrm{VDC/} / 3 \mathrm{~A} @ 125 \mathrm{VAC}, 30 \mathrm{~W} / 37.5 \mathrm{VA}, 27 \mathrm{MHz}$ |  |
|  | 1260-145F | $8 \times 16,60 \mathrm{VDC} / 125 \mathrm{VAC}, 1 \mathrm{~A} @ 30 \mathrm{VDC} / 3 \mathrm{~A} @ 125 \mathrm{VAC}, 30 \mathrm{~W} / 37.5 \mathrm{VA}, 20 \mathrm{MHz}$ |  |
|  | 1260-145G | $12 \times 12,60 \mathrm{VDC} / 125 \mathrm{VAC}, 1 \mathrm{~A} @ 30 \mathrm{VDC} / .3$ A @ $125 \mathrm{VAC}, 30 \mathrm{~W} / 37.5 \mathrm{VA}, 27 \mathrm{MHz}$ |  |
| Power | 1260-120 | $20-\mathrm{Ch}$ SPST, $125 \mathrm{VDC} / 250 \mathrm{VAC}, 10 \mathrm{ADC} / 13 \mathrm{AAC}, 300 \mathrm{~W} / 2000 \mathrm{VA}$, 400 Hz (Power) $/ 50 \mathrm{MHz}$ (Small Signal) | Rack \& Panel with power pins supplied |
|  | 1260-116 | 24-Ch SPDT, $30 \mathrm{VDC} / 250 \mathrm{VAC}, 5 \mathrm{ADC} / \mathrm{AAC}, 150 \mathrm{~W} / 1250 \mathrm{VA}, 50 \mathrm{MHz}$ | 78-Pin Mating Connector supplied |
|  | 1260-121 A/B | $12-\mathrm{Ch}$ SPDT, $125 \mathrm{VDC} / 250 \mathrm{VAC}, 10 \mathrm{ADC} / 13 \mathrm{AAC}, 150 \mathrm{~W} / 1250 \mathrm{VA}, 35 \mathrm{MHz}$ 400 Hz (Power) $/ 35 \mathrm{MHz}$ (Small Signal) | Screw Terminal Interface or Rack \& Panel Interface available |
| $\mathrm{RF}(50 \Omega / 75 \Omega)$ | 1260-150 | 10 (1x4), $50 \Omega, 100 \mathrm{VDC} / \mathrm{VAC}, 250 \mathrm{mADC} / \mathrm{mAAC}, 3 \mathrm{~W}(\mathrm{RF}), 500 \mathrm{MHz}$ | Coaxial Mating Connectors (2) supplied, Pins not supplied. |
|  | 1260-152/172 | 17-Ch SPDT, 50 or $75 \Omega, 30 \mathrm{VDC}, .5 \mathrm{ADC}, 10 \mathrm{~W}, 1.2 \mathrm{GHz} @ 50 \Omega, 900 \mathrm{MHz} @ 75 \Omega$ |  |
|  | 1260-152HV/172HV | 20-Ch SPST \& 2-Ch SPDT, 50 or $75 \Omega$, $500 \mathrm{VDC} / \mathrm{VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W} / \mathrm{VA}, 700 \mathrm{MHz}$ |  |
|  | 1260-155 | 2 (SP4T), $50 \Omega, 30 \mathrm{VDC/VAC}, 0.5 \mathrm{AAC} / \mathrm{ADC}, 10 \mathrm{~W}(\mathrm{RF}), 1.5 \mathrm{GHz}$ | MCX Connectors $75 \Omega$ available upon request. |
|  | 1260-155A | 2 (SP4T), $50 \Omega, 30 \mathrm{VDC/VAC}, 0.5 \mathrm{AAC} / \mathrm{ADC}, 10 \mathrm{~W}$ (RF), 3.0 GHz |  |
|  | 1260-155T | 2 (SP4T), $50 \Omega, 5 \mathrm{VDC} / \mathrm{VAC}, 0.5 \mathrm{AAC} / \mathrm{ADC}, 1 \mathrm{~W}$ (RF), 1.5 GHz |  |
|  | 1260-155AT | 2 (SP4T), $50 \Omega$, $5 \mathrm{VDC} / \mathrm{VAC}, 0.5 \mathrm{AAC} / \mathrm{ADC}, 1 \mathrm{~W}$ (RF), 3.0 GHz |  |
| Microwave ( $50 \Omega$ ) | 1260-160B | 2(SPDT), DC to 18 GHz , 1-slot | SMA Coax Not Supplied |
|  | 1260-160E | 5(SPDT), DC to 18 GHz , 2-slot |  |
|  | 1260-162A | 1 (2x2 Transfer Switch), 490 W @ $100 \mathrm{MHz}, 50 \mathrm{~W} @ 18 \mathrm{GHz}$, DC to 18 GHz , 2-slot |  |
|  | 1260-162B | 2 (2x2 Transfer Switch), 490 W @ $100 \mathrm{MHz}, 50 \mathrm{~W} @ 18 \mathrm{GHz}$, DC to 18 GHz , 2-slot |  |
|  | 1260-164A | SP4T, 490 W @ 100 MHz , 50 W @ 18 GHz , DC to 18 GHz , 2-slot |  |
|  | 1260-164B | 2 (SP4T), 490 W @ 100 MHz , 50 W @ 18 GHz , DC to 18 GHz , 2-slot |  |
|  | 1260-167A | SP6T, DC to 18 GHz , 2-slot | Relays replaceable in under 5 min . SMA Coax Not Supplied |
|  | 1260-167B | 2(SP6T), DC to 18 GHz , 2 -slot |  |
| Development | 1260-700 | Prototyping Module for 1256 or the 1260-100, 88 Digital I/O Control Lines, $6^{\prime \prime} \times 3.5^{\prime \prime}$ Prototyping Area, $0.1^{\prime \prime} \times 0.1^{\prime \prime}$ | Mating Connector Not Supplied |
| Controller | Option 01T installed/uninstalled | Control up to 12-1260 Series switch cards or Adapt-a-Switch plug-ins. Register based for high-speed switching. Message-based for programming. IEEE-488 and SCPI. | Not compatible with Option 01 syntax. |

 for Assistance.

1260 Series Switch Cards

- VXI Switching •DC to Light

The $\mathbf{1 2 6 0}$ Series of Switch Cards is the only product that provides you the convenience of message-based control for ease of programming and a register-based interface for high-speed control. Our family of full-size switch modules affords you switching solutions that include optical, RF, microwave, signal, matrix, multiplexers, power and discrete. So whatever your application, we have a solution. We are always adding to and refining our selection, so please visit our website for the latest information. In addition, if you don't see what you want, please contact us and we will be happy to discuss a custom solution with you.

## 1260 Series, C-Size, Selection Guide for VXI and 1255A

| Signal Type | Model No. | Configuration Ө Max Spec. Ratings | Connection Type/Comments |
| :---: | :---: | :---: | :---: |
| Digital Test | 1260-14 | 96 Discrete I/O, TTL, $5.25 \mathrm{~V}, 15 \mathrm{~mA}$ source/48 mA sink, $252 \mathrm{~mW}, 1 \mathrm{kHz}$ or 200 kHz | IDC Flat Ribbon Supplied |
|  | 1260-14 (CMOS) | 96 Discrete I/O, CMOS, 5.00 V, 6 mA source/sink, $30 \mathrm{~mW}, 1 \mathrm{kHz}$ or 200 kHz |  |
|  | 1260-14C | 96 Discrete I/O, Open Collector, $32 \mathrm{~V}, 200 \mathrm{~mA}$ sink, $6.4 \mathrm{~W}, 1 \mathrm{kHz}$ or 200 kHz |  |
| General Purpose | 1260-12 | 20-Ch DPDT, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC/AAC}, 60 \mathrm{~W} / 62.5 \mathrm{VA}, 35 \mathrm{MHz}$ | Positronic SGMC (solder) Supplied |
|  | 1260-13 | $40-\mathrm{Ch}$ DPST, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 62.5 \mathrm{VA}, 50 \mathrm{MHz}$ |  |
|  | 1260-16 | $40-\mathrm{Ch}$ SPDT, $110 \mathrm{VDC} / 250 \mathrm{VAC}, 5 \mathrm{ADC/AAC}, 150 \mathrm{~W} / 1250 \mathrm{VA}, 30 \mathrm{MHz}$ |  |
|  | 1260-17 | $80-\mathrm{Ch}$ SPDT, $250 \mathrm{VDC/} 250 \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 30 \mathrm{~W} / 62.5 \mathrm{VA}, 60 \mathrm{MHz}$ | IDC or DIN (crimp) Supplied |
|  | 1260-18 | 152-Ch SPST, 220 VDC/250 VAC, 2 ADC/AAC, $60 \mathrm{~W} / 125 \mathrm{VA}, 100 \mathrm{MHz}$ | 160-pin DIN (crimp) NOT Supplied |
| Power | 1260-20 | 20-Ch DPST, $250 \mathrm{VDC} / 380 \mathrm{VAC}, 8 \mathrm{ADC/AAC}, 150 \mathrm{~W} / 2000 \mathrm{VA}, 30 \mathrm{MHz}$ | Positronic GMCT (solder) Supplied |
|  | 1260-20B | $20-\mathrm{Ch}$ independent form A/B or SPDT, $250 \mathrm{VDC} / 380 \mathrm{VAC}, 8 \mathrm{ADC} / \mathrm{AAC}, 150 \mathrm{~W} / 2000 \mathrm{VA}, 30 \mathrm{MHz}$ |  |
|  | 1260-22 | $20-\mathrm{Ch}$ SPST, configurable, $250 \mathrm{VDC} / 250 \mathrm{VAC}, 20 \mathrm{ADC} / \mathrm{AAC}, 600 \mathrm{~W} / 4800 \mathrm{VA}, 300 \mathrm{KHz}$ | Rack \& Panel (solder) Supplied |
|  | 1260-22A | Mux, 5(1x4) \& 10(1x2), 250 VDC/250 VAC, 20 ADC/AAC, $600 \mathrm{~W} / 4800 \mathrm{VA}, 300 \mathrm{KHz}$ |  |
| Multiplexers | 1260-30A | $1 \times 40,2$ Wire, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 62.5 \mathrm{VA}, 10 \mathrm{MHz}$ | Positronic SGMC (solder) Supplied |
|  | 1260-30B | 2 (1x20), 2 Wire, 220 VDC/250 VAC, 2 ADC/AAC, 60 W/62.5 VA, 10 MHz |  |
|  | 1260-30C | 4 (1x10), 2 Wire, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 62.5 \mathrm{VA}, 10 \mathrm{MHz}$ |  |
|  | 1260-30D | 8 (1x5), 2 Wire, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 62.5 \mathrm{VA}, 10 \mathrm{MHz}$ |  |
|  | 1260-35 | 1 x 96 (STK), 2 Wire, configurable, $220 \mathrm{VDC/250} \mathrm{VAC}$,1 ADC/AAC, $60 \mathrm{~W} / 125 \mathrm{VA}, 50 \mathrm{MHz}$ | IDC or DIN (crimp) Supplied |
|  | 1260-38 | 16(1x8), 1,2, or 4 Wire, S/W configurable, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 125 \mathrm{VA}, 30 \mathrm{MHz}$ | 160-pin DIN (crimp) NOT Supplied |
|  | 1260-38T | $16(1 \times 8)$, 2 or 4 Wire, S/W configurable, $220 \mathrm{VDC} / 250 \mathrm{VAC}, 2 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 125 \mathrm{VA}, 30 \mathrm{MHz}$ |  |
| Multi-Purpose | 1260-37 | 40-Ch SPDT \& 8(1x6) Mux, $250 \mathrm{VDC/VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 60 \mathrm{~W} / 62.5 \mathrm{VA}, 35 \mathrm{MHz}$ | IDC or DIN (crimp) Supplied |
|  | 1260-39 | 5-Ch DPST, $220 \mathrm{VDC} / \mathrm{VAC}, 10 \mathrm{ADC} / \mathrm{AAC}, 150 \mathrm{~W} / 2000 \mathrm{VA}, 5 \mathrm{MHz}$ | AMP, Positronic SGMC Connectors or pins NOT supplied |
|  |  | 48-Ch SPST, 6(1x2) 1-wire Mux, 3(lx4) 1-wire Mux, 5(2x8) 1-wire Matrix, 110 VDC/125 VAC, 1 ADC/AAC, $60 \mathrm{~W} / 125 \mathrm{VA}, 30 \mathrm{MHz}$ |  |
| Matrix | 1260-40A | $4 \times 24$ Matrix, 2-Wire, 250 VDC/VAC, 1 ADC/AAC, $30 \mathrm{~W} / 62.5 \mathrm{VA}, 20 \mathrm{MHz}$ | Positronic SGMC (solder) Supplied |
|  | 1260-40B | $8 \times 12$ Matrix, 2-Wire, 250 VDC/VAC, 1 ADC/AAC, $30 \mathrm{~W} / 62.5 \mathrm{VA}, 20 \mathrm{MHz}$ |  |
|  | 1260-40C | 2(4x12) Matrix, 2-Wire, $250 \mathrm{VDC} / \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 30 \mathrm{~W} / 62.5 \mathrm{VA}, 20 \mathrm{MHz}$ |  |
|  | 1260-45A | 4(4x16) Matrix, 2-Wire, $250 \mathrm{VDC} / \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 30 \mathrm{~W} / 62.5 \mathrm{VA}, 25 \mathrm{MHz}$ | IDC or DIN (crimp) Supplied |
|  | 1260-45B | 2(4x32) Matrix, 2-Wire, $250 \mathrm{VDC} / \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 30 \mathrm{~W} / 62.5 \mathrm{VA}, 25 \mathrm{MHz}$ |  |
|  | 1260-45C | 2(8x16) Matrix, 2-Wire, $250 \mathrm{VDC} / \mathrm{VAC}, 1 \mathrm{ADC} / \mathrm{AAC}, 30 \mathrm{~W} / 62.5 \mathrm{VA}, 25 \mathrm{MHz}$ |  |
| RF ( $50 \Omega$ ) | 1260-50C | $8(1 \times 4) \mathrm{s} / \mathrm{w}$ configurable to $1 \times 39,200 \mathrm{VDC} / \mathrm{VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W}(\mathrm{RF}), 350 \mathrm{MHz}$ | Connector body Supplied, Coax pins NOT Supplied |
|  | 1260-50D | 16 (1x4) s/w configurable to 1x79, $200 \mathrm{VDC/VAC}, .5 \mathrm{ADC/AAC}, 10 \mathrm{~W}(\mathrm{RF}),>200 \mathrm{MHz}(1 \times 79)$ |  |
|  | 1260-51 | S/w configurable as $6(2 \times 6), 3(2 \times 12), 2 \times 36$ Matrix, $110 \mathrm{VDC} / 125 \mathrm{VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 30 \mathrm{~W} / 62.5 \mathrm{VA}$, $400 \mathrm{MHz}(2 \mathrm{x} 6) / 325 \mathrm{MHz}(2 \times 36)$ |  |
|  | 1260-54 | 6(1x4) w/optional terminations, $30 \mathrm{VDC/100} \mathrm{VAC}, \mathrm{1.5} \mathrm{ADC/AAC} 40 \mathrm{~W},, 1.3 \mathrm{GHz}$ | SMC Connectors |
|  | 1260-58 | 4 (SP8T), $24 \mathrm{VDC/VAC}, 10 \mathrm{mADC} / \mathrm{mAAC}, 10 \mathrm{~W}$ (RF), 750 MHz | SMB Connectors |
|  | 1260-59A | 4 (SP4T), $24 \mathrm{VDC} / \mathrm{VAC}, 10 \mathrm{mADC} / \mathrm{mAAC}, 10 \mathrm{~W}(\mathrm{RF}), 4 \mathrm{GHz}$ | SMB Connectors |
|  | 1260-59B | 8 (SP4T), $24 \mathrm{VDC/VAC}, 10 \mathrm{mADC} / \mathrm{mAAC}, 10 \mathrm{~W}(\mathrm{RF}), 4 \mathrm{GHz}$ |  |
| Special RF | 1260-75A | 8 (1x4) s/w configurable to $1 \times 39,75 \Omega, 200 \mathrm{VDC} / \mathrm{VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W}(\mathrm{RF}), 100 \mathrm{MHz}$ | Connector body Supplied, Coax pins NOT Supplied |
|  | 1260-75B | 16(1x4) s/w configurable to 1x79, $75 \Omega$, $200 \mathrm{VDC/VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W}(\mathrm{RF}), 100 \mathrm{MHz}$ |  |
|  | 1260-93A | $8(1 \times 4) \mathrm{s} / \mathrm{w}$ configurable to $1 \times 39,93 \Omega, 100 \mathrm{VDC} / \mathrm{VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W}(\mathrm{RF}), 100 \mathrm{MHz}$ |  |
|  | 1260-93B | 16(1x4) s/w configurable to 1x79, $93 \Omega$, $100 \mathrm{VDC/VAC}, .5 \mathrm{ADC} / \mathrm{AAC}, 10 \mathrm{~W}(\mathrm{RF}), 100 \mathrm{MHz}$ |  |
| Microwave (50 $\Omega$ ) | 1260-60A | 3 (SPDT), single slot \& 24 external relay drivers, $40 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ | SMA Coax NOT Supplied. Positronic SGMC (Crimp) Supplied. |
|  | 1260-60B | 3(SPDT), single slot \& 24 external relay drivers, $50 \Omega$ terminations, $40 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ |  |
|  | 1260-64A | 4(SP6T), dual slot \& 32 external relay drivers, 40 W (RF), 18 GHz |  |
|  | 1260-64B | 2 (SP6T), dual slot 832 external relay drivers, $40 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ |  |
|  | 1260-64C | SP6T, dual slot 832 external relay drivers, $40 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ |  |
|  | 1260-66A | 6(1x6), dual slot, $30 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ | SMA Coax NOT Supplied. |
|  | 1260-66B | 4(1x6), dual slot, $30 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ |  |
|  | 1260-66C | 2(1x6), dual slot, $30 \mathrm{~W}(\mathrm{RF}), 18 \mathrm{GHz}$ |  |
|  | 1260-67A | 6 (1x6), single slot, $50 \mathrm{~W}(\mathrm{RF}),>18 \mathrm{GHz}$ |  |
|  | 1260-67B | 4 (1x6), single slot, $50 \mathrm{~W}(\mathrm{RF}),>18 \mathrm{GHz}$ |  |
|  | 1260-67C | 2(1x6), single slot, $50 \mathrm{~W}(\mathrm{RF}),>18 \mathrm{GHz}$ |  |
| Optical | 1260-82C | 3(1x2), single slot, FC Optic Connectors, 1290-1570 nm wavelength, single-mode fiber | Ideal for SONET testing. Other Fiber types, Wavelengths \& Connectors available (Specials) |
|  | 1260-82D | 4(1x2), single slot, FC Optic Connectors, 1290-1570 nm wavelength, single-mode fiber |  |
|  | 1260-82F | 6(1x2), single slot , FC Optic Connectors, 1290-1570 nm wavelength, single-mode fiber |  |
|  | 1260-822B | 2 (2x2), single slot , FC Optic Connectors, $1290-1570 \mathrm{~nm}$ wavelength, single-mode fiber |  |
|  | 1260-822D | $4(2 \times 2)$, single slot , FC Optic Connectors, $1290-1570 \mathrm{~nm}$ wavelength, single-mode fiber |  |
|  | 1260-84A-1 | $1 \times 4$, single slot , FC Optic Connectors, $1290-1570 \mathrm{~nm}$ wavelength, single-mode fiber |  |
|  | 1260-84B-1 | 2(1x4), single slot, FC Optic Connectors, 1290-1570 nm wavelength, single-mode fiber |  |
|  | 1260-88A-1 | 1x8, single slot, FC Optic Connectors, $1290-1570 \mathrm{~nm}$ wavelength, single-mode fiber |  |
|  | 1260-88B-1 | 2(1x8), single slot, FC Optic Connectors, 1290-1570 nm wavelength, single-mode fiber |  |
|  | 8455 | Multi-Channel, Variable Optical Attenuator, l-slot, FC Optic Connectors, single-mode fiber |  |
|  | 8800 | Optical Attenuator, dual slot, FC Optic Connectors, 1200-1700 nm wavelength, single-mode fiber |  |
| Controller | $\begin{array}{\|l\|} \hline \begin{array}{l} \text { Option 01T } \\ \text { installed/uninstalled } \end{array} \\ \hline \end{array}$ | Control up to 12-1260 Series switch cards or Adapt-a-Switch plug-ins. Register based for high-speed switching. Message-based for programming. IEEE-488 and SCPI. | Not compatible with Option 01 syntax. |

## Product Selection Guide

## 1261B VXI Chassis

- High Reliability; Ease of Maintenance
- Best Power and Cooling in VXI Chassis


1260-100 and 1260-101 Adapt-a-Switch ${ }^{\oplus}$ Platforms

- Modular VXI Switch Carrier
- High Density

The revolutionary Adapt-a-Switch ${ }^{\oplus}$ Platform delivers unprecedented density and flexibility in either a one-slot or a two-slot, C-size VXIbus module. The former carrier accommodates up to two plug-in switch cards, while the latter accommodates up to six plug-in switch cards providing optimum switching solutions. The plug-ins are inserted easily and directly from the front panel of the carrier without removing the carrier module from the chassis, allowing ease of maintenance and upgradeability. Switching configurations are expandable through the use of a shared analog bus. Switching solutions include RF, microwave, signal, matrix and multiplexer as well as power and discrete.

## Other Products and Services



Series 1250 GPIB Programmable Switching System
One of the first modular GPIB programmable switching systems, the model $\mathbf{1 2 5 0}$ has been the work horse of the industry. It accepts up to 5 switch plug-in cards in any combination. Modules are available to switch signals for applications such as microwave, RF, audio, high-voltage, highcurrent, low-level, and video.

## ANSI Standard Modular Instruments

- Programmable Bus Emulator, Programmable Digital Test Module, Serial Emulator
- Legacy Instrument Replacements

Racal Instruments is the exclusive distributor of products manufactured by C\&H Technologies and Talon Instruments. With the newly acquired products, Racal Instruments has expanded its offerings to include Carrier, Source, Measurement, Switching, Prototyping and Digital Modules for a variety of platforms including VXI, PXI, VME, and CPCI. The mezzanine approach reduces total system cost, increases I/O capability per slot, and facilitates the reuse of carriers in new applications. Legacy instruments can be replaced using mezzanine instruments and an intelligent carrier.


## System Integration - Modular ATE System Design Turnkey Solutions

Our advanced Freedom ${ }^{\mathrm{TM}}$ Series of functional test systems is a revolutionary concept in Automatic Test Equipment (ATE). Freedom lets you test what you want, the way you want. Its open platform design takes advantage of today's advanced
 technology and software to produce a state-of-the-art system that delivers maximum performance that can be updated easily. We share one objective and that is to configure and specify the most precise, economical and optimal solution possible. A variety of software platforms allows test engineers to quickly analyze the test data, share information, and find accurate solutions to their testing and production needs, all in a fully integrated, powerful turnkey system.
We're with you every step of the way. We'll engineer the system, build it, install it, and support it. Our commitment to ISO level quality assures that each system is fully tested for maximum performance and reliability by the same team that designed it for you. The result is the confidence that you have done the very best you can to accelerate your time-to-market as well as control your costs.

Racal Instruments is proud of our commitment to customer satisfaction. We routinely design and manufacture modified standard product offering as well as design and produce application-specific test instruments.


