

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 *DynamicSignals / Kinetic Systems V196-ZA11* at our website: *Click HERE*

V196

13-slot C size VXI Bus Chassis

13-slot, C-size VXI Bus Chassis featuring increased power and cooling, system monitoring, and a rugged modular design.

Ideal for the latest generation of high-performance VXI instrumentation.



KineticSystems' V196 is one of the industry's highest performance 13-slot, C-size VXI chassis.

APPLICATIONS

Data acquisition and control systems

Automatic test equipment (ATE)

Product development and debugging

and many more

FEATURES

- Low-profile occupying only 10U of rack space
- 1 KW or 1.4 KW plugging power system
- 13-slot high-current VXI backplane
- Plugging fan module with (3) 152 cfm fans
- Intelligent monitoring with remote output
- VXI plug&play compliant for 1 & 2-tier receivers
- Rack slide and cabletray options
- High-performance digital test ready

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

KineticSystems

GENERAL DESCRIPTION

The KineticSystems' V196 is the industry's highest performance 13-slot, C size VXI chassis. Featuring increased power and cooling, system monitoring, and a rugged modular design, HPC VXI is ideal for the latest generation of high-performance VXI instrumentation.

Capable of delivering over 3000W through the backplane, the Tracewell HPC VXI is available with single or dual power supplies that plug directly into the backplane, eliminating high-current DC wiring while providing exceptional dynamic load response. To efficiently manage this amount of power, the 13-slot backplane uses a unique power distribution scheme and special high current DIN connectors. The high-flow fan module is also pluggable and supplies 300 cfm of airflow at 0.125" of H2O board restriction in a fully loaded chassis.

Tracewell HPC VXI also features comprehensive system monitoring. This intelligent system provides a warning to the operator when power and cooling readings go out of tolerance. The power monitor continuously verifies all seven VXI DC voltages, and has the unique ability to notify the user of a past voltage fault even if it returns to normal. The cooling monitor verifies fan function and is also available with a temperature monitor option. In the event a cooling fault is detected, the monitor shuts down the system to prevent costly damage to the installed VXI boards. A front panel display provides local status for power and cooling as well as other major system functions. In addition, a rear connector outputs both power and cooling monitor information for remote site operation.

This VXI plug&play compatible chassis occupies just 10U of rack space and is designed to accommodate a single tier receiver assembly. Other options include bottom mounted cable tray and rack slides.

PHYSICAL

Construction:	
Sheet aluminum	052-H32 alloy; sides (0.125"), top/bottom covers, fan housing (0.062") optional 2U cabletray (0.080")
Sheet steel	ASTM A366; upper/lower card cages, upper/lower front cableways/covers, power supply cover (0.060")
Aluminum extrusion	6101-T6 alloy; cardcage front and mid profiles, rack flanges
Cardguide	snap-in, 0.062" pcb thickness, white nylon, UL 94V-2 flame rated material
Cardcage:	Front loading, 6U x 340mm 'C' size, 13 slots maximum, IEEE 1101.1
Dimensions:	28.15"D (715 mm), 19.0" W (483 mm), 17.47" H (10U; 444 mm)
Weight:	52 lbs. (23.6 kg)
Cableways:	6 front cableways with covers; (2) upper, (2) lower and 1 per side
Rack-Slides:	Optional
Cabletray:	Optional 2U cabletray attaches to bottom of unit; capable of supporting up to 200 lbs. during bench-top operation; includes mounting hardware;

BACKPLANE

General:	13 slot, VXI 'C' size monolithic, 96 pin high current DIN connectors
Bus structure:	VXI 32 bit
Assembly:	SMT/press-fit assembly
Layer count:	8 layers
Control:	Active automatic bus-grant and IACK jumpering, active termination
PCB construction:	FR4 epoxy-glass laminate, multilayer, all-stripline, SMOBC, silkscreen on two sides, 1oz. copper signal and power planes minimum, UL94V-0, 0.125" (3.18mm) pcb thickness
Impedance:	50 Ohms nominal on all signal lines, non-loaded pcb
Termination:	Active onboard, electrically inboard; Thevinin equivalent to 194 Ohms at 2.94V
Decoupling:	High frequency decoupling at each slot (0.1F SMD ceramic); Bulk distributed low frequency (100FSMD Tantalum)
DC distribution:	High current power midplane distributes power from plugging power supplies to backplane
Compliance:	VXI-1 Rev. 1.4

COOLING

Airflow:	Rear intake, top/side exhaust, ducted plenum, pressurized
Fan:	(3) 152 cfm, 12 VDC
Air filter:	Rear accessible, washable media, 30 PPI, tool accessible

CONTROL AND INPUT

Switches:	Front panel: AC on/off (rocker); reset (pushbutton, momentary)
Reset control:	200ms debounced reset to backplane; asserted by front panel reset switch or VME module; also provides monitor reset
SYSFAIL:	Signal driven only by backplane VME modules; front panel LED is only a status indicator
Indicators:	Front panel SYSRESET, SYSFAIL DC Fault (red), power and cooling (tri-color) LED indicators
Power input:	Rear panel AC inlet (IEC320) with fuse drawer, line cord provided with NEMA L6-20R plug, cord retainer bail
Circuit protection:	Rear panel 2-pole magnetic switched circuit breaker

ENVIRONMENTAL

Operating Temperature:	- 20°C to 50°C (start @ 0°C) (derate each output linearly to 50% at 70°C)
Humidity:	95% non-condensing
Storage Temperature:	- 40°C to +85°C

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

KineticSystems

AGENCY COMPLIANCE

UL	UL1950
CSA	CSA22.2 No. 234 Level 5
IEC	IEC950, Class 1
VDE	EN60950,
BABT	Compliance to EN 60950, BS 7002
CB	Certificate and report
CE	Mark

WARRANTY

1 year limited warranty

MONITORING

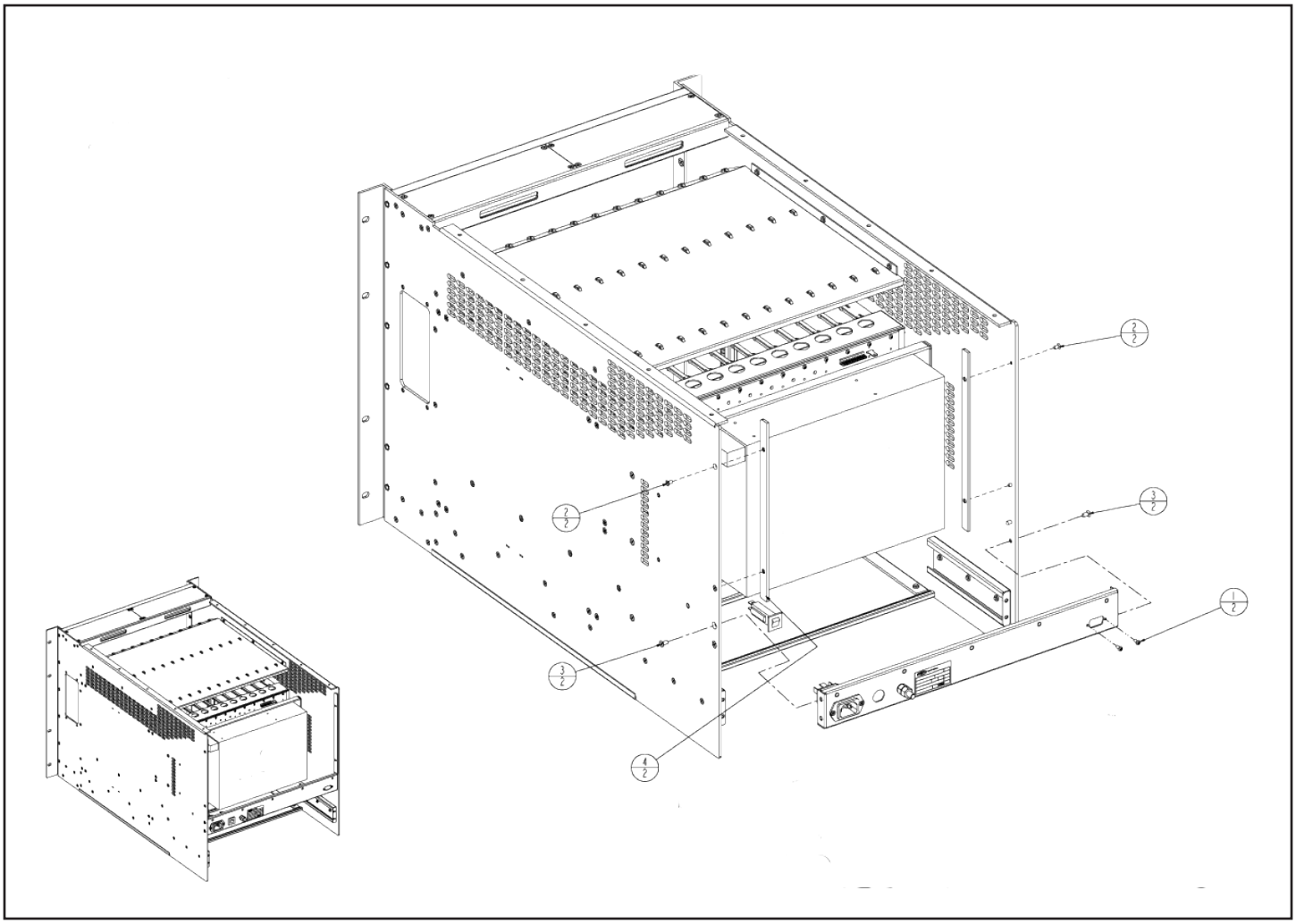
Interface:	Front panel LED indicators and rear panel 9-pin status connector
Functions:	
Power:	7 independent voltage monitors for +5, -5.2, -2.2, +/-12, and +/-24VDC; power fault is generated when any voltage falls below 90% of nominal; power fault is a latched signal to record intermittent conditions; a power fault drives both a front panel LED and rear panel relay closure
Cooling:	verifies RPM and voltage for each fan; cooling fault is generated if fan speed falls below 50% of nominal or 12V not present; a cooling fault drives front panel LED, rear panel relay closure and a system shutdown using global DC inhibit
Monitor reset:	all monitor faults are latching and can be reset by depressing front panel reset button or by cycling AC power; 5 second delay occurs after any reset prior to further fault detection
Outputs:	
Power LED:	Green = no fault exists; Red = fault currently exists; Yellow = intermittent fault occurrence
Cooling LED:	Green = no fault exists; Red = system shutdown due to cooling fault; Yellow = system shutdown due to non-cooling fault (i.e. loss of fan power)
DC Fault LED:(A and B):	power supply global DC OKAY monitor
Rear panel 9-pin remote status connector (AMP p/n 747321-4):	Power and cooling faults drive relay closure (see status connector pinout)

POWER SUPPLY

Input:	
Input voltage:	85-264 VAC 120-350 VDC
Frequency:	47-440 Hz
Inrush current:	40 A peak max. (soft start)
Efficiency:	70-80% typ. @ full case load
Power factor:	0.99 typ. meets EN6100-3-2
Output:	
+5 V	60 A
-5.2 V	35 A
-2 V	35 A
+12 V	4 A
-12 V	4 A
+24 V	8.5 A
-24 V	8.5 A
Overall reg:	0.4% or 20 mV max. (36 W modules 4% max.)
Ripple:	
RMS:	0.1% or 10 mV, whichever is greater
Pk-Pk:	1.0% or 50 mV, whichever is greater Bandwidth limited to 20 MHz
Dynamic response:	<2% or 100 mV, with 25% load step.
Overcurrent protection:	Single, main of dual output module 105%-120% of rated output current. Aux output of dual output module 105-140% of rated output current. Triple output module internally protected
Short circuit protection:	Protected for continuous short circuit Recovery is automatic upon removal of short.
Overvoltage protection (measured at sense connection):	Single output modules 2-5.5 V 122-134% 6-60 V 110-120%
Reverse voltage protection:	100% of rated output current
Thermal protection:	All outputs disabled when internal temp exceeds safe operating range. >5 ms warning (AC OK signal) before shutdown

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

Main Assembly Drawing



Status Connector Pinout:

PIN	FUNCTION
1	Chassis Ground
2	Low Voltage NC Relay
3	Low Voltage NC Relay
4	Low Voltage NO Relay
5	Low Voltage NO Relay
6	Airflow Shutdown NC Relay
7	Airflow Shutdown NC Relay
8	Airflow Shutdown NO Relay
9	Airflow Shutdown NO Relay

Dimensions:

D1: 28.15″ (715 mm)	483 mm)	H1: 17.47″ (444 mm)
D2: 27.52″ (699 mm)	422 mm)	H2: 6.00″ (153 mm)
D3: 12.09″ (307 mm)	W3: 15.56 (395 mm)	H3: 3.05″ (78 mm)

Notes:

1 Do not obstruct intake or exhaust vents

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

KineticSystems

ACCESSORIES

V196-KB11	Single width blank panel
V196-KB21	Double width blank panel
V196-KB31	Triple width blank panel
V196-KC21	2U cable tray kit
V196-KR11	24 inch support rails
V196-KR21	30 inch support rails
V196-KS11	Rack Slide kit
V196-DOOR	Chassis door

ORDERING INFORMATION

The KineticSystems V196 includes chassis, backplane, power supply, cooling and monitoring per the following standard configurations:

PART NUMBER	DESCRIPTION
V196TA11	1 KW power system
V196TA21	1.4 KW power system

900 N. State St.
Lockport, IL 60441-2200

Toll-Free (US and Canada):
phone 1-800-DATA NOW
1-800-328-2669

Direct:
phone +1-815-838-0005
fax +1-815-838-4424

Email:
mkt-info@kscorp.com

To find your local sales representative or distributor or to learn more about KineticSystems' products visit:

www.kscorp.com

Copyright © 2008 DynamicSignals, LLC. All rights reserved.
Updated February 21, 2008

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