

# MODEL 4516

## DEVELOPMENT CHASSIS

### FULL WIDTH / 84HP

### 6U PLUG IN BOARDS



NIS's small footprint, instrumentation-style enclosure is a development chassis with 42HP internal width accommodating up to twenty (20) 3U x 160mm boards on 4HP centers (0.8 inch) or sixteen (16) boards on 5HP centers (1.0 inch). A typical VPX configuration consist of a 12 slot backplane on 5HP centers and dual plug in power supplies. A rear transistion card cage can also be installed which is accessible via a rear opening, hinged door, or custom I/O panel.

As with all NIS enclosures, Model 4516 may be configured with a 6U Eurocard backplane, such as VME64x, CompactPCI®, PXI, or VPX/OpenVPX. Optionally, a 6U x 80 mm rear transition module (RTM) subrack may be installed.

Standard configurations include a plug in 500W power supply which can be upgraded up to 1kW. Optionally, one or two PICMG 2.11 hot swap/redundant/N+1 plug-in power supplies can also be accommodated, with either AC or DC input.

Installed below the front subrack is a fan tray that provides aggressive air movement up through the front subrack and channeled through a specially designed plenum that runs along the top of the enclosure, with air egressed out the top.

The 4516 may be configured with NOVA's  $\mu$ P-based System Environmental Monitor (SEM). The SEM monitors and controls critical system operational parameters such as temperature, fan speed, and input and output power; additionally, the SEM contains user-definable analog and digital channels as well as HTTP and SNMP protocols (in firmware).

For more information visit our web site: [www.novaintegration.com](http://www.novaintegration.com)

- › Supports 6U x 160mm boards
- › Configurable with single or multiple backplanes
- › VME, VME64x, VPX/OpenVPX, CompactPCI or custom backplanes
- › Meets IEEE 1101.1, 1101.10 and 1101.11 mechanical and EMC requirements
- › AC and DC input power options
- › PICMG 2.11 plug-in, N+1 power supplies
- › Board pitches supported include 4HP (0.8") and 5HP (1") pitch
- › Anti-rotation, extrusions with integrated card guides enhance chassis strength and resist torsional flex
- › 6U x 80mm RTM subrack option
- › System Environmental Monitor option
- › Aggressive air cooling via "push" fan tray

**AS 9100****BUREAU VERITAS**  
Certification  
Certificate No: US008267-1

### ENVIRONMENTAL CHARACTERISTICS

Temperature, operating	-20°C to +70°C
Temperature, non-operating	-40°C to +85°C
Humidity	10% to 95%, non-condensing
Altitude, operating	-1,500 ft. to 25,000 ft.
Altitude, non-operating	-1,500 ft. to 40,000 ft.
Vibration	MIL-STD-810G, Method 514.5, Procedure I
Shock, operating	MIL-STD-810F, Method 516.5, Procedures VI
Shock, non-operating	MIL-STD-810G, Method 516.5, Procedures I, IV & VI
EMC	IEEE 1101.10
ESD	MIL-STD-1686A

### HARDWARE PLATFORMS

Eurocard Backplane	Up to -slot, front loading subrack 8-slot on 5HP (1.0") pitch typical
System Environmental Monitor (SEM)	Optional See (SEM) data sheet
Rear Transistion (optional)	Customer definable rear I/O panel. Customer definable peripheral bay.

### PHYSICAL CHARACTERISTICS

Dimensions	17.53" H x 20.8" W x 16.61" D (typical)
Weight	varies by configuration
Mounting	Tabletop

### ELECTRICAL CHARACTERISTICS

Input Power (standard)	85-264 VAC @ 47-63 Hz
	20-28 VDC
Input Power (optional)	36-72 VDC
	Custom options available
Inrush Current	Varies with installed power supply
	Customer selectable including: NEMA 5-15P
Input Power Connector	MIL-C-26482 (MS3472 or MS3474) Customer Selectable
Power Supply Type	450 or 650W Hard mounted PSU Up to 1kW plug in cPCI or VPX

### ORDERING TABLE (PARTIAL)

95-4516-20605-001	6U enclosure with 6U x 160mm subrack; 20-slot CompactPCI® backplane; 450W hard mount PSU, 90-264 VAC @ 47-63 Hz input; tabletop
95-4516-16505-001	6U enclosure with 6U x 160mm subrack; 16-slot VPX backplane; 450W hard mount PSU, 90-264 VAC @ 47-63 Hz input; tabletop
95-4516-16405-500	6U enclosure with 6U x 160mm subrack and 6U x 80mm RTM; 16-slot VME64x backplane (w/P0); dual 6U/8HP, 500W, PICMG 2.11 power supply, 90-264 VAC @ 47-63 Hz input; tabletop
95-4516-16605-500	6U enclosure with 6U x 160mm subrack and 6U x 80mm RTM; 16-slot CompactPCI® backplane; dual 6U/8HP, 500W, PICMG 2.11 power supply, 90-264 VAC @ 47-63 Hz input; tabletop
95-4516-12305-500	6U enclosure with 6U x 160mm subrack and 6U x 80mm RTM; 12-slot OpenVPX backplane; dual 6U/8HP, 500W, VPX power supply, 90-264 VAC @ 47-63 Hz input; tabletop
95-4516-12505-500	6U enclosure with 6U x 160mm subrack and 6U x 80mm RTM; 12-slot VPX backplane; dual 6U/8HP, 500W, VPX power supply, 90-264 VAC @ 47-63 Hz input; tabletop
Contact factory for additional configurations and options	

### OUTLINE DRAWING

Outline drawing available on request