



Front View of CT-310A

## Portable Five-slot C-size VXIbus Mainframe

### Overview

The CT-310A 5-slot VXIbus mainframe is designed from the ground up for portability, weighing significantly less than other portable VXIbus mainframes with equivalent power capacity. With the introduction of VXI Technology's VXIbus Modular Instrumentation Platform (VMIP™), up to 12 high-performance instruments can be accommodated in a 5-slot VXIbus mainframe, allowing truly portable test scenarios.

### Modularity and Maintenance

The CT-310A has been designed with a plug-in power supply and fan assembly. This makes it ideal for applications that require a portable tester to be used in production, repair facility, or transported to the field. This approach also lends itself to improve mean-time-to-repair (MTTR) of the mainframe.

Each supply voltage is monitored, with LED feedback provided on the front panel, allowing the user to automatically determine a power failure. All of the VXIbus voltages are also available at the rear panel for powering external circuits or for external voltage monitoring.

Each of the seven power supply outputs is made available on the rear panel for external monitoring of the backplane voltages. In addition, +5 V and +12 V are made available on the rear panel to power external devices and are protected by self-healing fuses.

The module-cooling fan may be switched for high or low speed. High-speed operation provides maximum cooling to the instrument modules, while low-speed provides lower noise operation. The fan speed is continuously monitored, and provides a visual indication of fan failure as well as a logic signal on the rear panel for system monitoring.

### Performance

Our years of VXIbus mainframe design experience, along with advancements in technology, have enabled us to produce a light weight, portable 5-slot mainframe that outperforms much larger and more costly 5- or 6-slot VXIbus mainframes.

The CT-310A uses a pressurized airflow system. As air enters the mainframe from the rear, it is pressurized below the cards, then evenly distributed among all slots and along the length of each card slot, using a specially engineered "airflow deflector" and pressurized plenum cooling system. The air is then exhausted through the top and away from the user.

The CT-310A has a high-performance, multi-layered backplane, which is jumperless and uses semiconductor switches for improved mean-time-between-failures (MTBF) and ease of configuration.

# Features

Designed for Portability

Lightweight (Under 22 lbs including power supplies)

Small Portable Footprint

Can House up to Twelve VXIbus Instruments (VMIP™)

Field-replaceable Power Supply and Fan Subassembly for Low MTTR

Remote Isolated On/Off Control

+5 V and +12 V are Available for Powering the UUT and Other External Devices

## Portable Five-slot C-size VXIbus Mainframe

The CT-310A has over 500 Watts of total usable power, which is equivalent to 1300 Watts in a 13-slot VXIbus mainframe. This is more than enough power for virtually any application, and considerably more than other portable mainframes in its class. Remote isolated on/off control is also provided, allowing the CT-310A to be mounted in hard-to-reach places and powered on or off by a remote switch.

### Specifications

**Size:** 21.3" deep x 7" high x 15" wide  
C-size, 5 VXIbus card slots

**Weight:** 22 lbs

**VXIbus Revision:** 1.4

**Cooling:** > 65 W/slot

**Rackmount Kit:** Kit with rackmount ears and front door available to allow the CT-310A to be recessed in the rack for cable harnessing

**Input Voltage:** 100 - 240 V ac, 50/60 Hz



Rear View of CT-310A

**MTBF:** 100,000 Hours

**MTTR:** 5 Minutes

**Temperature:** 0 °C to 55 °C Operating  
-40 °C to +70 °C Storage

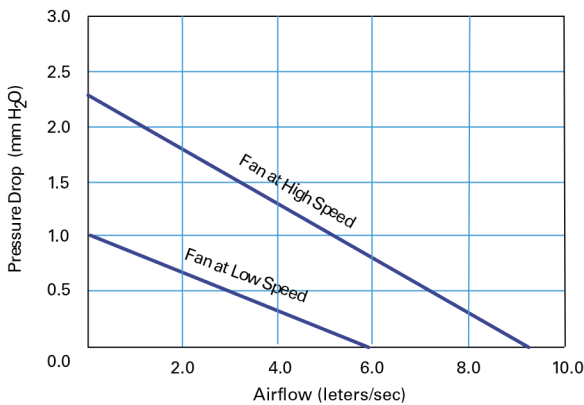
**Power Supplies:** UL, CSA, TUV approved  
Short circuit, over-voltage and thermal shutdown protection

### DC Supply Voltage:

	Peak Current (Imp)	Dynamic Current (Imd)	
+5 V 40 A		5 A	
-5.2 V	10 A	5 A	5 A
-2 V	8 A	2 A	2 A
+12 V	8 A	2 A	2 A
-12 V	4 A	2 A	2 A
+24 V	4 A	2 A	2 A
-24 V	4 A	2 A	2 A

**Total Usable Power:** 500 W < 40 °C  
350 W @ 40 °C -55 °C

Cooling Specification Chart



### Ordering Information

**CT-310A** Portable 5-slot, C-Size VXIbus Mainframe

**Option 52:** Rackmount Ears

**Option 53:** Rackmount Door Kit

**Option 57:** 20" Rack Slides (for Flush Mounting)

**Option 58:** 24" Rack Slides (for 4" Recessed Mounting)

**Option 110:** Blanking Panel (Single)

**Option 111:** Blanking Panel (Double)

CT-310A