

# Agilent E1406A VXI GPIB Command Module, C-Size

## **Data Sheet**

- 1-Slot, C-size, message-based commander
- GPIB, RS-232, Slot 0, and Resource Manager
- 2 MB RAM
- MXIbus protocol support for high throughput
- Easy to program as message-based instruments

## Description

The Agilent Technologies E1406A Command Module is a **C-size, 1-slot VXI message-based commander** that provides **Slot 0** and **Resource Manager functions**. It can act as a VMEbus system controller and GPIB (IEEE-488)-to-VXIbus interface device for transparently communicating with any manufacturer's message-based VXI modules. The E1406A Command Module has FLASH memory for downloadable drivers, so you can program Agilent register-based devices using the high-level SCPI programming language. It also translates SCPI commands for register-based instruments and therefore, makes these VXI devices as easy to program as message-based instruments.

This command module also includes a MXIbus Resource Manager for VXIbus extensions. This allows you to maintain high-throughput performance in multiple mainframe systems. With its flexible triggering and clock interfacing, you can synchronize the VXI backplane 10 MHz clock to an external TTL signal.

Refer to the Agilent Technologies Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.



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### **Product Specifications**

#### **General Characteristics** Processor: 16 MHz 68000 Interface: IEEE-488 **Clock accuracy:** 0.005% elapsed time 1.75 MB FLASH max. Memory: 2 MB RAM max. Shared memory: 512 KB max. Agilent IBASIC: Yes Slot 0 functions: Yes **Resource manager:** Yes MXIbus resource manager: Yes CLK10: Yes Temperature coefficient: 0.001%, to 0.012% of time since last set (per° C change in temperature) **Resolution:** 1.0 s

## CLK10

Input:	TTL or low-level ac	
Minimum input level:	40 mV p-p	
Maximum input level:	42.5 V p-p	
Output:	TTL	
Jitter:	0.03% (55 dB)	
Initial accuracy:	50 ppm	
Maximum stability:	± 20 ppm/year (0-55° C)	
Typical stability:	$\pm$ 3 ppm/year at 25° C	
Trigger Input		

Levels:	TTL
Input load:	55 kΩ, 50 pF
Maximum rate:	12.5 MHz (TTL), 40 MHz (ECL)
Minimum pulse width:	30 ns (TTL), 12.5 ns (ECL)
Maximum trigger delay:	30 ns

## RS-232 Interface (for terminal only)

Baud rate:	300, 1200, 2400, 4800, 9600, 19200	
Parity:	Even, Odd, One, Zero, None	
Character size:	7, 8	
Pace:	Xon/Xoff, None	
Hardware handshake:	DTR, RTS	
Buffer size:	16 characters	
RS-232 terminals supported:	HP 700/92, HP 700/94, HP 700/22, HP 700/43; WYSE WY-30, DEC VT100, DEC VT220	
VXI compliance:	Revision 1.4 compliance	

## **General Specifications**

VXI Characteristics	
VXI device type:	Message-based commander
Size:	С
Slots:	1
Connectors:	P1/2
Shared memory:	Yes
VXI buses:	Local Bus A TTL Trigger Bus ECL Trigger Bus

Instrument Drivers - See the Agilent Technologies Website (http://www.agilent.com/find/inst\_drivers) for driver availability and downloading. Command module firmware: n/a

Command module firmware rev:	n/a
I-SCPI Win 3.1:	n/a
I-SCPI Series 700:	n/a
C-SCPI LynxOS:	n/a
C-SCPI Series 700:	n/a
Panel Drivers:	Yes
VXI <i>plug&amp;play</i> Win Framework:	Yes
VXI <i>plug&amp;play</i> Win95/NT Framework:	Yes
VXI <i>plug&amp;play</i> HP-UX Framework:	No

#### **Module Current**

	I <sub>PM</sub>	I <sub>DM</sub>
+5 V:	0.1	0.1
+12 V:	0	0
–12 V:	0	0
+24 V:	0	0
–24 V:	0	0
–5.2 V:	0	0
—2 V:	0	0
Cooling/Slot		
Watts/slot:	19.00	
$\Delta \mathbf{P} \mathbf{mm} \mathbf{H}_{2}0$ :	0.30	
Air Flow liter/s:	1.50	

## **Ordering Information**

Description	Product No.
VXI GPIB Command Module, C-Size	E1406A
Service manual	E1406A 0B3
Taiwan - Chinese localization	E1406A AB0
Korea - Korean localization	E1406A AB1
China - Chinese localization	E1406A AB2
Germany - German localization	E1406A ABD
Spain - Spanish localization	E1406A ABE
France - French localization	E1406A ABF
Japan - Japanese localization	E1406A ABJ
Italy - Italian localization	E1406A ABZ

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Online assistance: www.agilent.com/find/assist

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