1RU Digital Controllers for Antenna Mount Amplifiers/BUCs/Systems

XTC-114E

FEATURES

- *Full amplifier/BUC status and control*
- *Remote/local control via serial or Ethernet interface*
- *Full amplifier/BUC status front panel digital display*
- *Compact 1RU design*

The Comtech Xicom Technology line-up of 1RU digital controllers are designed to complement the Comtech line of amplifiers and BUCs by enabling their use in single thread, redundant or phase-combined system configurations. These controllers provide system control and offer local amplifier/BUC function controls. The communications to the amplifiers/BUCs can be either serial or Ethernet, expanding the Comtech range of products supported by the controllers.

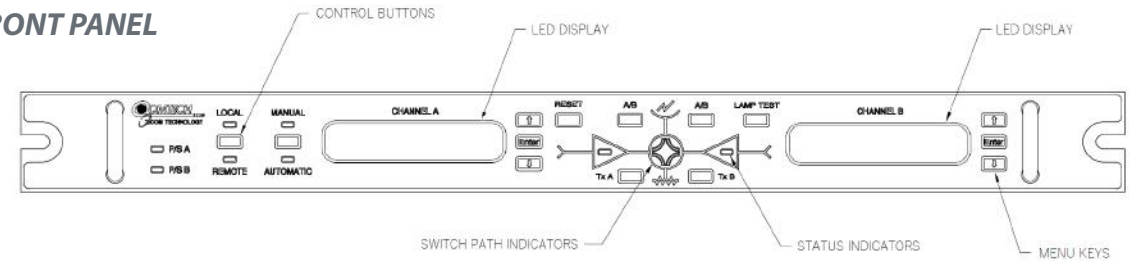
COMTECH XICOM TECHNOLOGY™

3550 Bassett Street • Santa Clara • CA 95054 • Tel: (408) 213-3000 • Fax: (408) 213-3001
www.xicomtech.com • email sales@xicomtech.com

XTC-114E

The **XTC-114E** controller is compact and requires only one rack unit (1¾ inches) of space in a standard 19-inch rack. By providing a single interface point, users can communicate with both amplifiers by connecting a single RS-232 or RS-422/485 serial connection or an Ethernet connection to the controller rear panel. The front panel status and control functionality is available through both the serial and Ethernet connections. The two-line front panel display shows the status for each amplifier, including temperature, forward and reverse power and more. The **XTC-114E** controller is user configurable for single thread, 1:1 redundant operation or 1+1 (hybrid combiner) operation, which makes it the most versatile controller we offer. Also, using the **XTC-114E** along with a single amplifier (1:0) allows a flexible upgrade path to a redundant system (1:1) later.

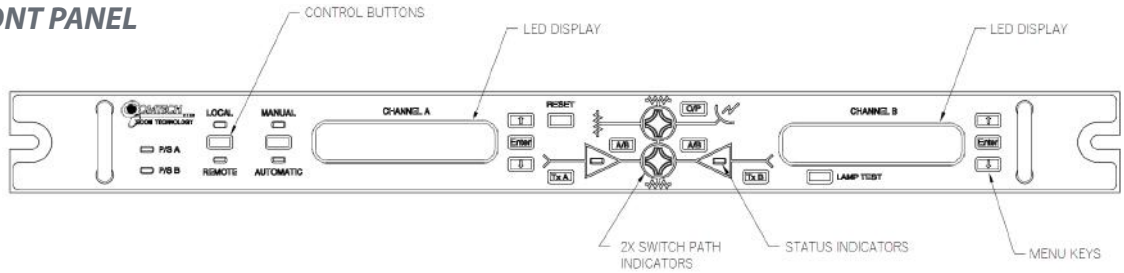
FRONT PANEL



XTC-115E

The **XTC-115E** controller is, like the XTC-114E controller, compact and requires only one rack unit (1 ¾ inches) of space in a standard 19-inch rack. It is based on the XTC-114E controller and so it carries the same communication and control options. The advantage of the **XTC-115E** controller is that it specifically illustrates a 1:1 redundant system configuration ***with load switch*** on the front panel, making it the perfect controller to conveniently monitor and control such a system.

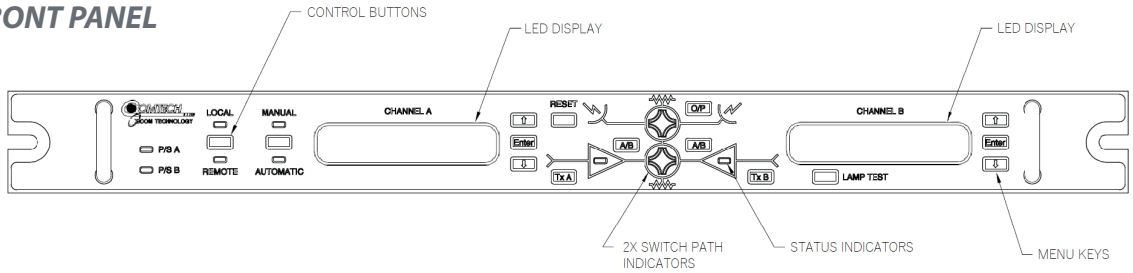
FRONT PANEL

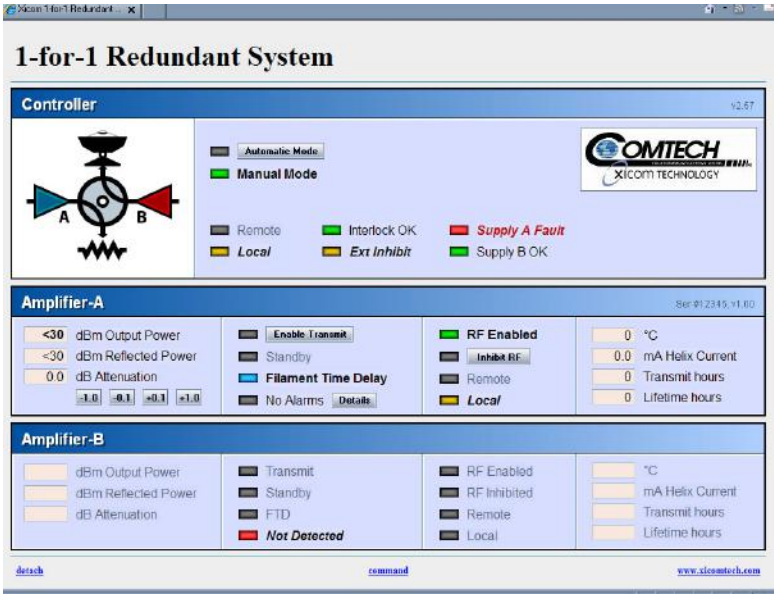


XTC-116E

The **XTC-116E** controller is, like the XTC-114E controller, compact and requires only one rack unit (1 ¾ inches) of space in a standard 19-inch rack. It is based on the XTC-114E controller and so it carries the same communication and control options. The advantage of the **XTC-116E** controller is that it specifically illustrates a 1:1 redundant system configuration ***with polarity switch*** on the front panel, making it the perfect controller to conveniently monitor and control such a system.

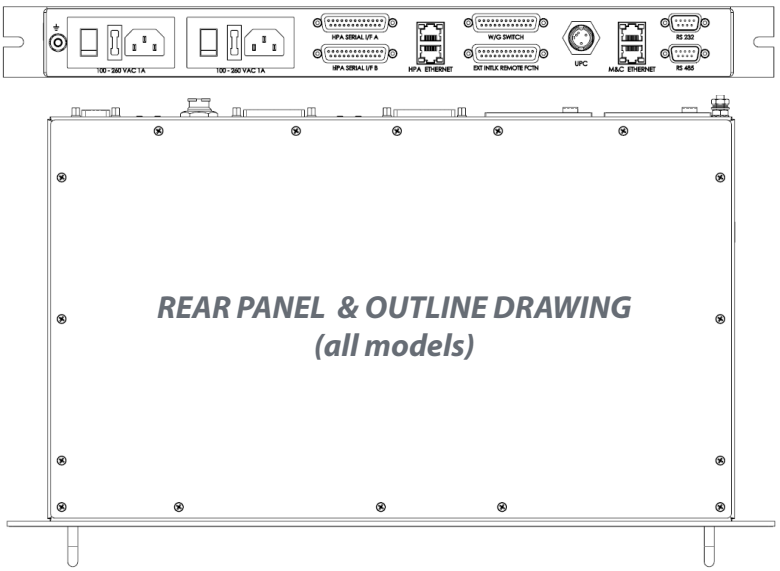
FRONT PANEL





Screen shot of web browser interface

DIMENSIONS (max)		
	INCHES	CENTIMETERS
L	10.0	25.4
H	1.75	4.4
W	19.0	48.3
WEIGHT (Typical) 7 lb. 3.18 kg.		



SELECTOR GUIDE

1RU Controller	Configurations Supported
XTC-114E	• 1:0 (single amp), 1:0 (two single amps) • 1:1 Redundant System • 1+1 (Hybrid Combiner/Switch-Around)
XTC-115E	The following configurations w/Load Switch: • 1:0 (single amp), 1:0 (two single amps) • 1:1 Redundant System • 1+1 (Hybrid Combiner/Switch-Around)
XTC-116E	The following configurations w/Polarity Switch: • 1:0 (single amp), 1:0 (two single amps) • 1:1 Redundant System • 1+1 (Hybrid Combiner/Switch-Around)

PRIME POWER

90 to 260 VAC
47 to 63 Hz, Single Phase
30 VA Maximum
0.95 Minimum Prime Power Factor

ENVIRONMENT

NONOPERATING TEMPERATURE RANGE	-50°C to +70°C
OPERATING TEMPERATURE RANGE	-10°C to +50°C (2°C/1000 Feet Derating)
HUMIDITY	Up to 95% Condensing
ALTITUDE	10,000 Feet MSL (maximum)
SHOCK AND VIBRATION	Normal Transportation
COOLING	Forced Air

MONITOR & CONTROL FUNCTIONS

Type		Function
CONTROLS	Local/Remote	Manual/Automatic
	HPA Power ON/OFF	Set Attenuation
	TX ON/OFF	Fault Reset
	Waveguide Switches	Set Alarms: Low Power High Power Reflected Power
	RF Inhibit Enable/Disable	
	Channel Select	
	Lamp Test	
STATUS - 2-Line Display	Not Detected	RF Power
	Temperature	Reflected Power
	Helix Current (TWTA only)	
	Faults: Summary Fault Over Temperature Fault Reflected Power Fault High Voltage Fault (TWTA only) Helix Current Fault (TWTA only) RF Chain Fault High RF Fault Low RF Fault External Interlock Fault Upconverter Fault (Amplifier with internal BUC only) Low Line Fault Amp Fan Lock Fault (SSPA only) Power Supply Fault (SSPA only) Amp F/W Checksum Bad Amp CPU Voltage Low Amp Cover Interlock Fault Amp Thermal Interlock Fault (TWTA only) Overdrive Fault (TWTA only) Momentary Helix Arc (TWTA only)	
STATUS - LEDs	Local/Remote	Filament Time Delay (TWTA Only)
	Manual/Automatic	Waveguide Switch Position(s)
	TX ON/OFF	Standby
COMPUTER - Hardware Interface	Ethernet Port	2 Serial Ports: RS-232 and RS-422/485
SERIAL/ETHERNET PORT	Xicom ASCII Commands	
ETHERNET PORT	*Web browser support:* I.E.9 and later, Chrome, Firefox *SNMP support:* V1 (V2c & V3 optional)	

Headquarters
Comtech Xicom Technology, Inc.
3550 Bassett Street
Santa Clara, CA 95054
USA

Phone: +1-408-213-3000
Fax: +1-408-213-3001

email: sales@xicomtech.com
Web: www.xicomtech.com

Europe Sales Office
Comtech Xicom Technology Europe, LTD
4 Portland Business Center
Manor House Lane
Datchet
Berkshire SL3 9EG
United Kingdom

Phone: +011 44 (0) 1753 549 999
Fax: +011 44 (0) 1753 549 997

email: sales@xicomeurope.com
Web: www.xicomtech.com

Asia Sales Office
Comtech Xicom Technology
150 Cecil Street
#08-02
Singapore 069543

Phone: +011 65 6325 1953
Fax: +011 65 6325 1950

email: asiasales@xicomtech.com
Web: www.xicomtech.com

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