

# Rack-Mount TWTAs with Touch Screen Control



Comtech Xicom Technology's new generation of XTRT rack-mount TWTAs provide an easy to use, intuitive touch screen interface for monitoring and controlling the amplifier. The new touch screen front panel displays the HPA's operational status, including power output and temperature, graphical displays of parameter trend analysis, and event logs. Local and remote diagnostics can also be easily performed via an Ethernet interface.

This new display eliminates the need for a separate external controller to control multiple TWTAs for common architectures. All operational data is saved within the amplifier's non-volatile memory, providing a complete history of the HPA in the event that the unit needs service or repair.

The XTRT family includes 3RU 400W TWTAs and 4RU 750W TWTAs in C-, X-, Ku- and DBS-bands. Ka-band and higher power amplifiers are also available.

## Touch Screen Features

- ❖ Intuitive Set-Up, Control and Monitoring
- ❖ System Configuration and Control
- ❖ TWTAs Performance Data and Event Logging
- ❖ Remote Diagnostics

## Amplifier Features

- ❖ RF Filtering
- ❖ RF Gain Control
- ❖ RS-232/422/485 and Ethernet Interfaces
- ❖ CE Certified

## Amplifier Options

- ❖ Uplink Power Control
- ❖ 1:N Redundant or Phase Combined Systems
- ❖ Extended Frequency Coverage
- ❖ Integrated Linearizers
- ❖ Block Up-Converters (BUCs)

## Xicom Support

- ❖ 24/7 Technical Support
- ❖ Service Centers Worldwide

# Rack-Mount TWTAs with Touch Screen Control

## Touch Screen Control Overview

Five easily accessible screens provide monitor and control of a multiple TWTA system, the TWTA operation, display of TWTA event logging data, TWTA performance data, and setup of the TWTA configuration including system mode.

Each screen features a common summary display at the top which provides the critical TWTA status information and TWTA output power level at a glance.

Setting of TWTA parameters such as output power and attenuation is a two-handed operation to prevent accidental changes. To make

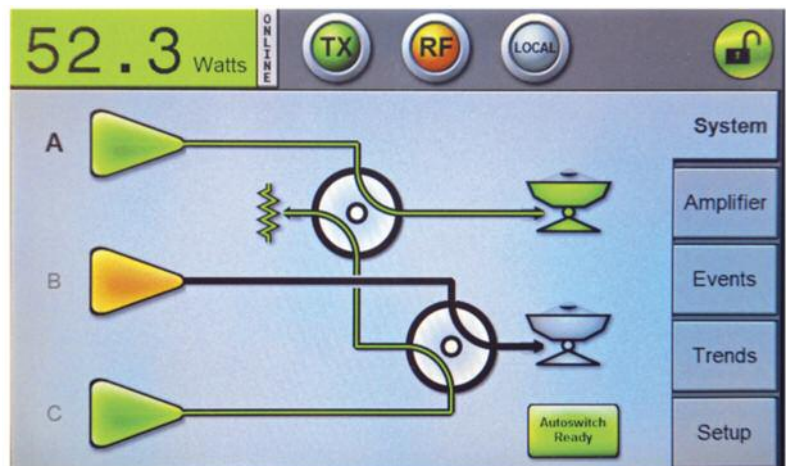
adjustments, select the parameter to adjust with one hand while turning the adjust control with the other. Unwanted screen operation can also be prevented with a screen lock feature.

The Events and Trends screens provide access to logged status and performance data over the life of the TWTA without the need to download the data to a PC or laptop. The logging feature can accommodate 14 years of data.

The TWTA can be reconfigured for different system requirements without TWTA hardware changes. New system configurations can be uploaded to meet new applications not previously accommodated.

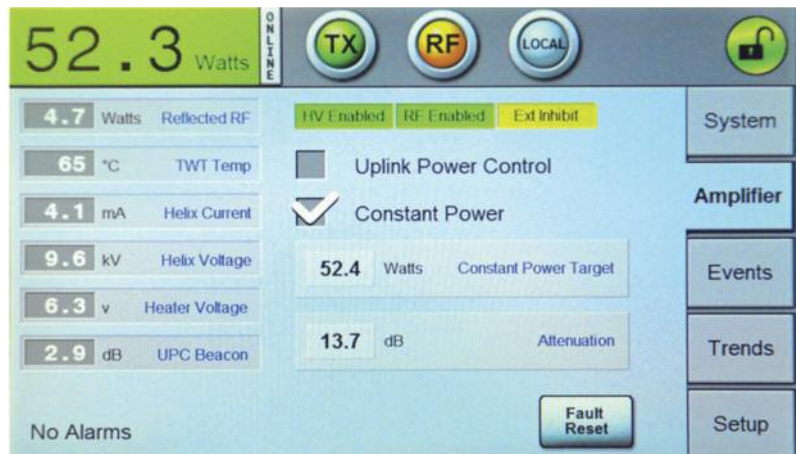
## System Screen

- ❖ Multiple TWTA system control built-in
- ❖ Display and control of redundancy, load and polarization switches
- ❖ Configurable for stand-alone, 1:1, 1+1 and 1:2 systems
- ❖ System control from any system amplifier
- ❖ Compatible with existing separate system controllers



## Amplifier Screen

- ❖ Display and control TWTA parameters
  - Attenuator
  - Helix voltage
  - Helix current
  - Temperature
  - Heater voltage
  - Reflected RF power
  - Status of control inputs
  - Alarm and fault status
- ❖ Optional uplink power control
- ❖ Constant power features
- ❖ Fault reset



# Rack-Mount TWTAs with Touch Screen Control

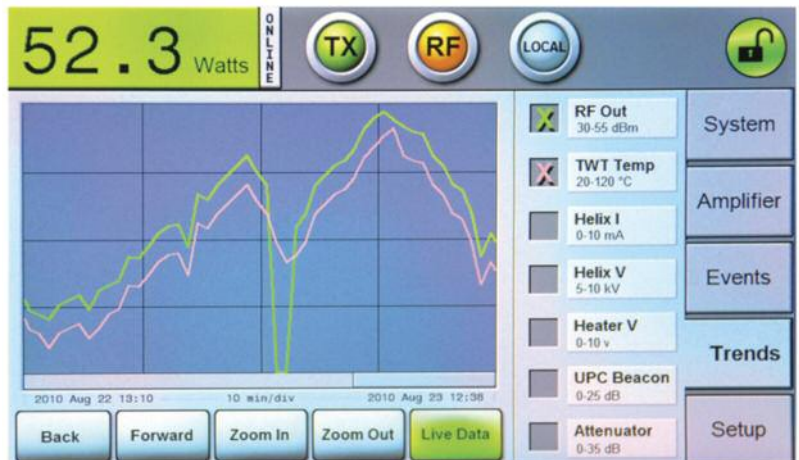
## Events Screen

- ❖ Displays Event Log in tabulated form with date and time, color-coded to distinguish system and TWTA status changes, alarms and faults
- ❖ Ability to add user notes and associate them with events
- ❖ Displays serial number, firmware version, heater and beam hours



## Trends Screen

- ❖ Displays two user-selected TWTA parameters over time including alarm and fault tags
  - TWT temperature
  - RF output
  - Helix current
  - Helix voltage
  - Reverse power
  - Cathode current
  - Beacon Strength
  - Attenuator value
- ❖ User adjustable time scale (10 second resolution in 48 hour mode; 4 hour resolution in 14 year mode)
- ❖ Max and min data over 4 hour period recorded and maintained for 14 years
- ❖ Critical data before and after alarms and faults recorded and maintained for 14 years



## Setup Screen

- ❖ Configure TWTA Operation
  - Start-up configuration
  - Alarm and fault configurations
  - Power levels for power alarms
  - RF Inhibit sense
  - Clock
  - Serial interface configuration
  - Ethernet interface (std) configuration
  - UPC (option) configuration
  - Screen brightness, key and alarm volume
- ❖ Display monitor port calibration data
- ❖ Configure system configuration – 1:0, 1:1, 1+1, 1:2, load/polarization switching, VPC



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**Comtech Xicom Technology**

## Available TWTAs with Touch Screen Control

Available with Optional Block Up-Converters and Linearizers					
Model Number	Frequency Band	Output Power (Watts)	Flange Power (Watts)	Rack Units	Weight (Lbs)
XTRT-400C	C	400	350	3	56
XTRT-750C	C	750	650	4	75
XTRT-2000C	C	2250	2000	11	210
XTRT-400X	X	400	350	3	56
XTRT-750X	X	750	650	4	75
XTRT-2000X	X	2250	2000	11	210
XTRT-2500X	X	2500	2250	11	210
XTRT-200K1	Ku	200	175	3	50
XTRT-400K	Ku	400	350	3	56
XTRT-750K	Ku	750	650	4	75
XTRT-1250KL	Ku	1250	500	6	115
XTRT-100DBS	DBS	95	85	3	50
XTRT-270DBS	DBS	270	225	3	50
XTRT-500DBS	DBS	500	415	4	75
XTRT-750DBS	DBS	750	650	4	75
XTRT-150Ka	Ka	150	125	3	54
XTRT-175Ka	Ka	175	150	3	54
XTRT-250KaL	Ka	250	100	3	54
XTRT-250Ka	Ka	250	215	3	54
XTRT-500Ka	Ka	500	400	4	74

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**Comtech Xicom Technology** has grown to be the world's leading SATCOM power amplifier supplier, offering the broadest product line in the industry. For more than 20 years, our focus on customers, innovation and quality has created tremendous breadth of products and created a company with a reputation for excellence.



*Amplifier Quality & Reliability Since 1991*

**Headquarters:**  
**Comtech XICOM Technology**  
 3550 Bassett Street  
 Santa Clara, CA 95054  
**Phone:** +1-408-213-3000  
**Fax:** +1-408-213-3001  
**e-mail:** sales@xicomtech.com

[www.xicomtech.com](http://www.xicomtech.com)

**European Sales Office:**  
**Comtech XICOM Technology**  
**Europe, LTD**  
 4 Portland Business Centre  
 Manor House Lane • Datchet  
 Berkshire SL3 9EG • United Kingdom  
**Phone:** +011 44 (0) 1753 549 999  
**Fax:** +011 44 (0) 1753 549 997  
**e-mail:** sales@xicomeurope.com

**Singapore Sales Office:**  
**Comtech XICOM Technology**  
 150 Cecil Street  
 #08-02  
 Singapore 069543  
**Phone:** +65 6325 1953  
**Fax:** +65 6325 1950  
**e-mail:**  
 asiasales@xicomtech.com