

Comtech Xicom's New SuperPower™ TWTAs



Comtech Xicom Technology, Inc. is one of the world's leading satellite communications uplink power amplifier supplier, offering the broadest product line in the industry.

portable and flyaway systems, secure high data rate communications and broadband access.

SuperPower Traveling Wave Tube Amplifiers for Fixed Service

Started by a couple of engineers in the San Jose, CA area in 1991, Xicom's focus on customers, innovation and quality has driven consistent growth and resulted in tremendous breadth of products and a reputation for excellence. With a 70,000 sq ft plant in Santa Clara, CA housing a broad, highly-capable engineering team, ISO-certified demand-flow manufacturing and a world-wide sales and service organization, Comtech Xicom Technology has become the go-to power amplifier provider for integrators and satcom service providers needing to meet their greatest challenges.

Comtech Xicom has introduced breakthrough new high-efficiency, high-power TWTA technology that doubles available output power and makes the new SuperPower™ TWTAs the first true Klystron replacement. Advanced space tube technology applied to am-

brings proven space designs down to the ground and takes established millimeter wave designs and scales them for use at Ku-band frequencies. The result is not only the highest power helix TWT ever offered for these commercial satcom uplink bands, but also an extremely efficient, compact and reliable amplifier that can dramatically lower capital and operations expense.



Comtech Xicom's new SuperPower™ TWTA.

The SuperPower TWTAs at both frequency bands are available as rugged outdoor antenna-mount units that can withstand -40 to +60 °C operating temperatures or as indoor rack-mount configurations that incorporate Xicom's TouchScreen front panels for ease of use and access. Either way, the operator saves space, prime power consumption, and money by incorporating the new technology.

Products

Comtech Xicom provides rugged, highly efficient and reliable amplifier products for commercial and military broadcast and broadband applications around the world including: Traveling Wave Tube Amplifiers (TWTAs); Klystron Power Amplifiers (KPAs); Solid-State Power Amplifiers (SSPAs) and Block Upconverters (BUCs).

This product range encompasses power levels from 8W to 3kW, with coverage across the 2 GHz to 45.5 GHz frequency spectrum.

Applications

Xicom High Power Amplifiers (HPAs) are used in critical communications links on the ground, in the air and on the sea. They support fixed traditional and direct-to-home broadcast, mobile satellite news gathering (SNG), trans-

plifiers for fixed satellite communications uplinks changes the equation on power, efficiency and reliability.

With the highest power and longest warranty ever offered in outdoor antenna-mount and indoor rack-mount TWTAs, the SuperPower™ 2 kW Ku-band and 1.5 kW DBS-band TWTAs are revolutionizing satcom uplinks and opening up new possibilities in ground stations around the world. These amplifiers dramatically reduce the space, weight, power consumption, thermal load, and cost of high power for uplinks.

These breakthrough Ku- and DBS-band TWTAs were made possible with Xicom's advanced development of new SuperPower TWT technology that

The SuperPower TWTAs join Comtech Xicom Technology's industry-leading high efficiency TWT product line. The XTD-2000KHE Ku-band TWT provides the user with 750W of linear power in a compact, rugged package weighing only 92 lbs. and drawing less than 3200 watts of prime power.

The XTD-1500DBSHE DBS-band TWT provides the user with 560 watts of linear power for DTH applications in the same rugged 92 lb. package and draws only 2500 watts of prime power. Both units are small enough to be mounted in the antenna hub and are designed to operate over -40 to +60C. They have built-in predistortion linearizers, output protection circuitry, SNMP-based Ethernet monitor and control interfaces, and built-in redundancy switch control capability. Op-

tions are also offered for extended frequency bands, internal upconversion from L-band, and liquid-cooling for low acoustic noise. Companion redundancy and phase combining systems are also available.

In addition to the new SuperPower TWT technology, these TWTAs also incorporate Xicom's Life Xtension with Constant Current control mechanism for extending the useful life of the TWTA dramatically with very low risk while providing the operations team with valuable and accurate predictive information on end-of-life for long-term replacement planning. This feature not only saves on reduced capital expenditures from extension of TWTA use, but also reduced the uncertainty of replacement timing, allowing capital to be allocated more efficiently by op-

erators.

"It's exciting to see our commitment to this challenging development and this incredible product line come to fruition," said John Branscum, President of Comtech Xicom Technology.

"We could not be more pleased with initial customer reactions. Interest in the SuperPower products is the highest we've seen on any new development, because it really does change the business case for SATCOM uplinks. Xicom has a long history of pushing the limits of HPA technology, and we plan to continue that legacy of innovation in ad-



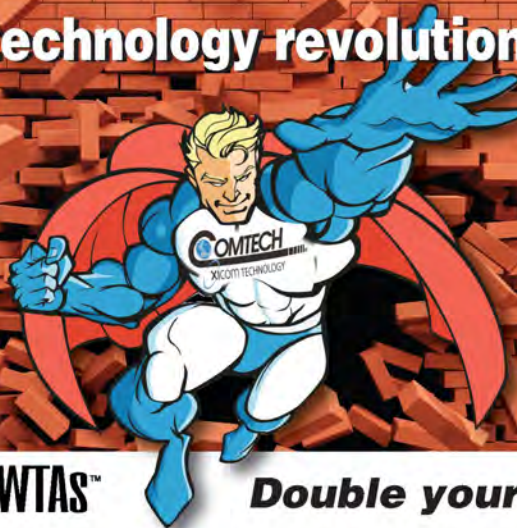
Comtech Xicom's rack-mount SuperPower™ TWTA using indoor rack-mount configurations that incorporate Xicom's TouchScreen front panels for ease of use and access.

vancing SATCOM HPA technology to solve our customers' hardest problems," added Branscum.

Breakthrough technology revolutionizes SATCOM



2 kW Ku-Band
1.5 kW DBS-Band



2 kW Ku-Band
1.5 kW DBS-Band

SUPERPOWER TWTAS™

Double your capacity!

Xicom Technology is introducing **NEW SuperPower** TWT amplifiers with radically improved efficiency that will help you achieve your savings goals.

- Double the Power of Typical Amplifiers
- 2 kW Ku-Band and 1.5 kW DBS-Band
- Saves Complex Multi-Amp Configurations
- Up to 80% Lower Power Consumption vs Klystrons
- Rain Fade Margin Improvement
- Transponder Flexibility

You can't beat the combination of features and performance of Xicom amplifiers.

Contact Xicom today and find out more.

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Amplifier Quality & Reliability Since 1991