

DTX5K/DTX10K

Strategic HF High Power Solutions

HF STRATEGIC
SUPPORT



Long Range Communications Capability for Voice and Data

Datron DTX5K (5kW) and DTX10K (10kW) are solid state HF Amplifiers designed for use in Maritime, Ground-to-Air, and Ground-to-Ground long range communications and support for both voice and data.

These amplifiers are designed to work with Datron's RT7700H series of HF transmitters and transceivers and comply with MIL-STD-188-141B ALE and MIL-STD-188-110B data.

ALE-enabled versions of these amplifiers work in conjunction with broadband antennas and are optimized for use in frequency agile scenarios that meet MIL-STD-188-141B ALE requirements.

When used with the Datron RT7700H, amplifier status and error messages are displayed on the radio's main screen and/or the DatronLINK-7700 (Virtual Remote Control and HF E-mail software).

An optional separate software package is available for remote management and control of the amplifiers.

Both the DTX5K and DTX10K high power amplifiers are designed for continuous use.

Each amplifier has smoke and over-temperature sensors along with status indicators that report the current operating condition of the amplifier. Both amplifiers are also capable of auto-shutdown if a major failure is detected or if there is a major power failure. In both cases, the amplifiers are placed in bypass mode.

Key Features

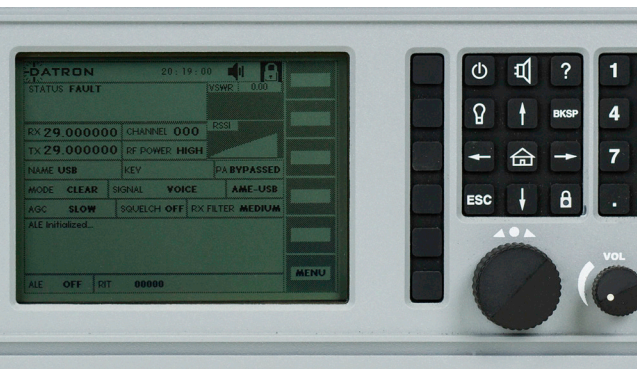
- Fully Solid State Design
MOSFET Power Amplifier
- Supports RT7700H
- All modes supported –AM, AME, SSB, ISB, Analog Voice, Digital Voice, DATA
- Capable of Continuous Duty Operation
- Supports MIL-STD-188-141B ALE
- Supports MIL-STD-188-110B Data
- Easy to Maintain
- Full Modular Construction
- Built-in Self-Test Capability
- Remote Monitoring
With RT7700H & DatronLINK-7700



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DATRON Amplifier Models

- DTX5K ALE compatible 5 kW amplifier
- DTX10K ALE compatible 10 kW amplifier

Subject to export regulations

Specifications subject to change without
notice - rev 200812

This datasheet contains no ITAR data.

GENERAL

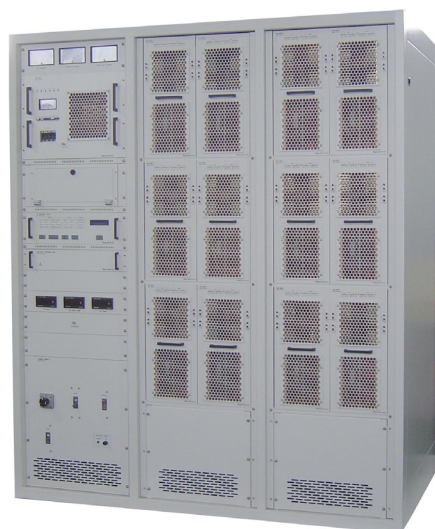
- FREQUENCY RANGE 1.6 - 30MHz typical
- PRE SET CHANNEL Radio dependent (up to 1000 channels)
CW, SSB, ISB, AM, AME, DATA,
Analog Voice, Digital Voice
- TYPE OF EMISSION Radio Dependent - 0dBm for full power
Radio dependent - Standard 10⁻⁶
7700-series, optional 10⁻⁸
- AUDIO INPUT LEVEL Per MIL-STD-188-141B ALE 2G/3G
- FREQUENCY STABILITY ≤ 3:1 at maximum power
- TUNING TIME 50 Ohms, 1 5/8" EIA Flange
- VSWR 5kW PEP for DTX5K, 10kW PEP for DTX10K
- OUTPUT IMPEDANCE Continuous Duty
- OUTPUT POWER Full Front Panel Metering and Indicators
Remote Control Panel Option
Core information is also available on the
RT7700H and the VRCU
- DUTY CYCLE Per MIL-STD-188-141B
- STATUS MONITORING Per MIL-STD-188-141B
Per MIL-STD-188-141B
- SPURIOUS SUPPRESSION Per MIL-STD-188-141B
- HARMONIC SUPPRESSION Per MIL-STD-188-141B
- CARRIER SUPPRESSION Per MIL-STD-188-141B

ENVIRONMENTAL

- POWER REQUIREMENTS 240V/380V AC 50/60Hz 3-Phase
(200-500V AC Nominal)
5kW less than 14kVA
10kW less than 28kVA
- AMBIENT TEMPERATURE 0°C to +50°C
- HUMIDITY Less than 95% at 40°C
- COOLING TYPE Forced Air (fan)
- DIMENSIONS 10kW : 1675mm(W) x 2000mm(H) x 900mm(D)
5kW : 1160mm(W) x 2000mm(H) x 900mm(D)



DTX5K (2 bays)



DTX10K (3 bays)



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