



Crescend RTK-450 Amplifier

Specifications

Frequency Range:	450-470 MHz
Current Draw:	8 Amperes (max)
Operating Voltage:	+13.8 VDC
Duty Cycle:	100%
Power Input:	0.4 - 2 Watts (3W max, no damage)
Power Output:	5 - 25 Watts, proportional to input power
Gain	11 dB (nom)
Spurious & Harmonics:	Meets FCC Requirements
Input/Output Impedance:	50 ohms (nom)
Load VSWR Tolerance:	VSWR Protected
Indicator LEDs:	DC On Low Output (indicates low gain, unit continues to operate) High VSWR (VSWR > 2.5:1, unit continues to operate) High Temp (output power reduced by 3 dB above safe operating temperature)
I/O Connector:	Filter Feedthrough Pins
Output Pins (Open Collector):	Summary (Low Output, High VSWR, High Temp)
Input Pin (TTL Level):	Active/ Bypass Mode (for bypass mode, pull pin to ground)
Input Connector:	N Female
Output Connector:	N Female
Cooling Method:	Fan (continuous operation)
Operating Temp. Range:	-30 ^o C to +60 ^o C
Storage & Transport:	-40 ^o C to +70 ^o C
Humidity:	80% at +40 ^o C (non-condensing)
Altitude:	10,000 feet maximum

Size

Mounting Method:	19" Rack Mount
Vertical Mounting:	7.0"
Horizontal Mounting:	19.0"
Depth:	6.0"
Weight:	10 pounds nominal

Description

The Crescend RTK-450 power amplifier is designed to work with the John Deere UHF RTK system. With 11 dB of gain, the amplifier boosts the power level of the standard RTK system to extend range and compensate for trees, foliage and other lossy objects. LED monitoring is provided as well as I/O connections. These may be used to remotely monitor PA status as well as remotely place PA in active or bypass mode. Should the PA experience a DC power loss or go into thermal protective shutdown, the PA will automatically go into bypass mode, keeping the site on the air until it is convenient to troubleshoot.