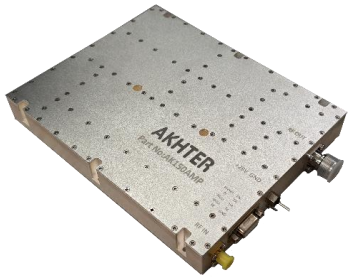
RF Power Amplifiers 100W-Solid State Broadband HPA

100W-Solid State Broadband HPA

(AK427100)

◆Product Feature

Ultra-wide bandwidth
High reliability
Easy to maintain



◆Product Specifications

Item	Specification	Remarks
Frequency Range	400MHz ~2700MHz	
Pin(dBm)	0dBm~5dBm	
Pout(dBm)	（51±1）dBm	Test Wave: CW
Gain, small signal	61db	Test Wave: CW
Gain adjustment range	15dB	
Gain Adjustment step size	0.5db	
Maximum input power without damage	20dBm	
Input return loss	≤-15dB	
Noise figure	≤15dB	
Harmonics	≤-10dBC@Odd Harmonics; ≤-12dBC@Even Harmonics	
Spurious	≤-60dBc	
PA Enable / Disable time	≤1uS	
Working Voltage/Current	28VDC±1V, ≤18A	
RF In connector	SMA-Female	
RF Out connector	N-Female	
Power Supply Connector	Pull-core Capacitance	
Working Temperature	-40~+65℃	
Storage Temperature	-55~+85℃	
Maximum Altitude	3000m	MIL-STD-810F Method 500.4
Vibration/Shock	Airborne	MIL-STD-810F Method 514.5/516.5 – Proc 1
Protection & Alarm	Over-temperature 75℃ and Over-VSWR	
Size	200mm *158mm *25mm	Exclusive Connector
Weight	≤1.4Kg	
Cooling	External Heatsink Required	

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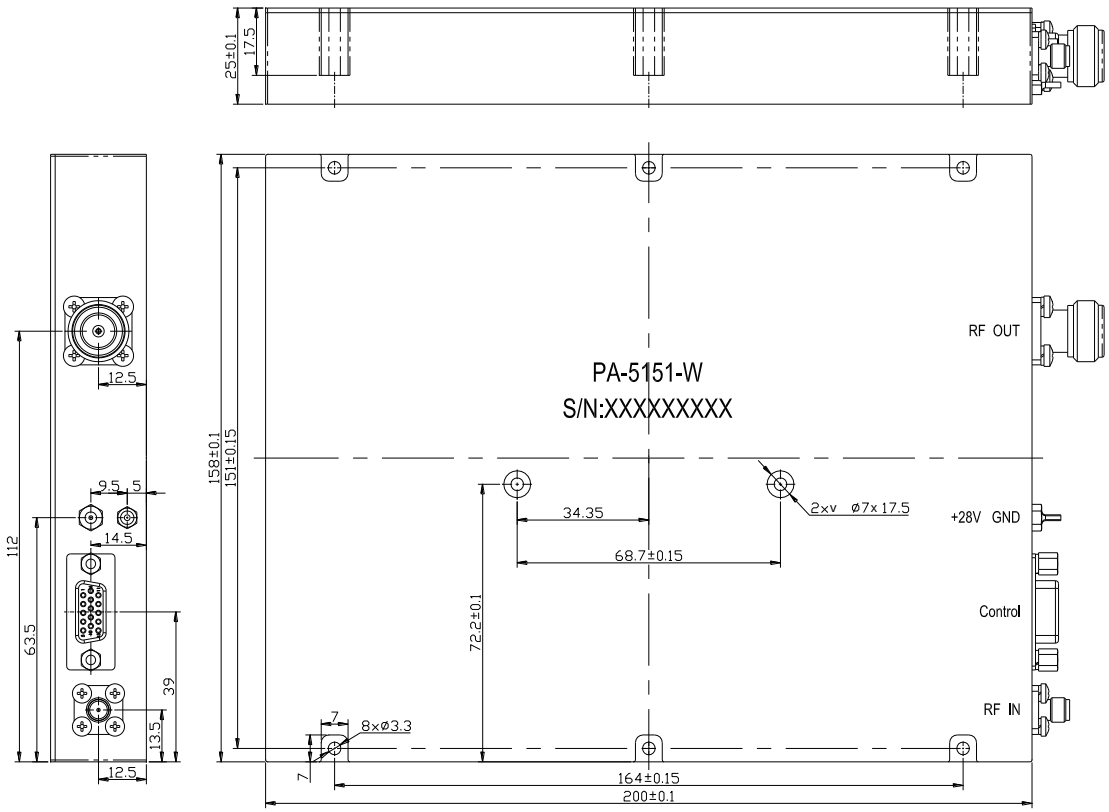
◆DC INTERFACE CONNECTOR

Pull-core Capacitance	A1	Ground Return	
Pull-core Capacitance	A2	+44.0-50.0VDC, 48.0VDC Nominal	Supply Voltage:
Monitoring Interface (DB15, Female)	PIN1	Not Used	
	PIN2	Temperature Reporting	Analog Output Voltage @ 10mV/°C with a 500mV offset (i.e. 0.75V = 25°C)
	PIN3	Not Used	
	PIN4	Not Used	
	PIN5	Attenuator Setting	Voltage input in the range of 0.5-3.0VDC, 0.5VDC corresponds with minimum attenuation, 3.0VDC is maximum attenuation. Leave pin open or grounded to utilize RS-485 interface.
	PIN6	PA Enable	0/3.3V logic levels: Power Amplifier disable is a TTL Logic Low (0V). (Internally Pulled-High 3.3V) Leave pin open or pulled high to utilize RS-485 interface.
	PIN7	Alarm	Amplifier Alarm indicator: Normally TTL Low A logic High indicates a fault condition, 0/3.3V Logic Levels
	PIN8	Not Used	
	PIN9	Current Reporting	Analog output voltage range of 1V/10A (i.e. 1.5V = 15A)
	PIN10	Not Used	
	PIN11	Not Used	
	PIN12	Not Used	
	PIN13	Not Used	No Connection
	PIN14	Not Used	No Connection
	PIN15	Reset	Hardware reset Logic 0 to reset PA and clear latched faults

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RF Power Amplifiers 100W-Solid State Broadband HPA

◆Product Outline Dimension Drawing



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