

**P/N: AMT-SPA-60180-50M****1- Introduction**

This power amplifier is a module that be integrated in an impact case. It has ability to be controlled and send its status by a serial port (RS422-Half Duplex). Module has full protection against over VSWR, over temperature, and reverse input voltage and etc.

2- Specifications

Row	parameter	value			Unit
		Min	Typ	Max	
1	Frequency range	6		18	GHz
2	Output power Saturation	47			dBm
3	Power gain	45	47		dB
4	Small signal gain ripple			±5	dB
5	ATT adjusting Range (Small signal)	0		30	dB
6	ATT adjusting Step (Small signal)		0.5		dB
7	Input power level (achieve saturation power)		0		dBm
8	Input return loss			-10	dB
9	Harmonics @Psat			-10	dBc
10	Spurious signals			-60	dBc
11	Operating voltage		28		V DC
12	Input and output RF Impedance		50		Ω

3- Mechanical specification

Row	parameter	value
1	Dimension (WxDxH)	280x160x65mm
2	Weight	6 Kg maximum
3	RF connector input	Type-SMA, Female
4	RF connector output	Type-N, Female
5	Power Supply and Data Connector	Round connector Type: TBD
6	Cooling	External heatsink required, not supply

4- Environmental characteristics

Row	parameter	value
1	Operating temperature	-20~+55°C
2	Non- operating temperature	-40~+75°C
3	Relative Humidity	0-95%

5- Protections

Row	parameter	value
1	Input overdrive	Diode limiter protection 1dB compression +15dBm
2	Reverse RF power	1≤VSWR<3 : normal operation (active output) 4≤VSWR<∞: shut down and send error
3	Temperature	T>80°C : alarming (active output) T>85°C : error (output off)
4	Short and open of RF Output	Shutdown
5	Over current	Shutdown

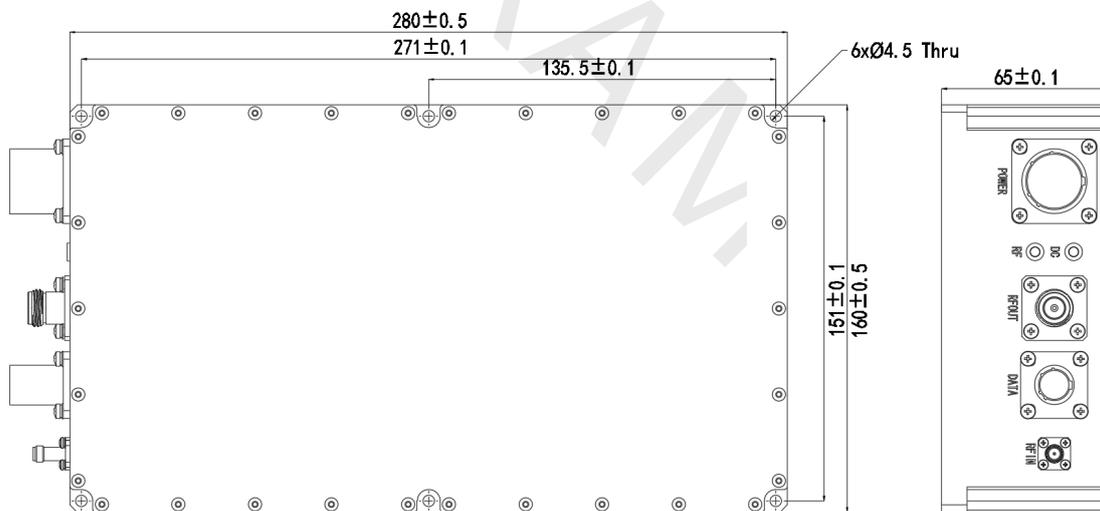
6- Communication interfaces

Row	parameter	value
1	RS-422	Serial management of Module
2	Interface Protocol	Reference “RS422 protocol”, provide along with products

7- Pin definitions

TBD

8- Dimensions



Unit: mm