



Model Number:
VAT60KX-435016

RF Components

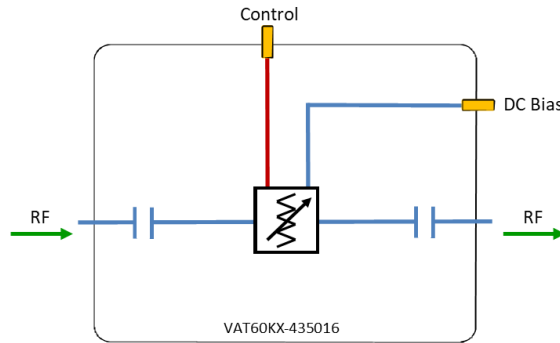
Wideband 60dB Variable Attenuator

1-24 GHz

- Wide attenuation range 0-60dB
- Small 0.5dB Minimum Step
- 7.0dB Insertion Loss at 24GHz
- TTL/SPI control
- DIP switch control option also available (please enquire)

Available with RF connector options:

- 50 Ω 2.92mm

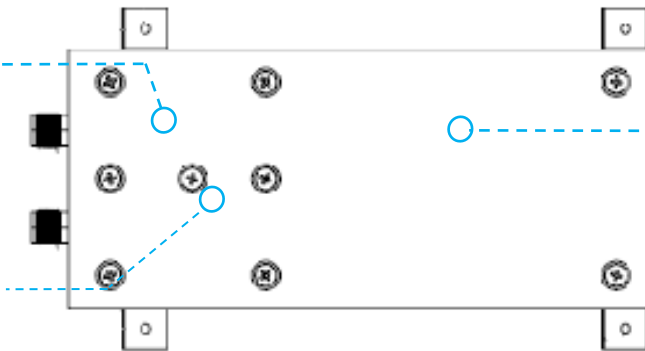


Attenuator

Compact
Housed in rugged compact enclosure

1-24 GHz
Wide operating frequency range.

12-20 V
External DC powering



Broadcast



Marine Oil & Gas



SNG & VSAT



Satellite Teleport





Technical specifications and operating parameters

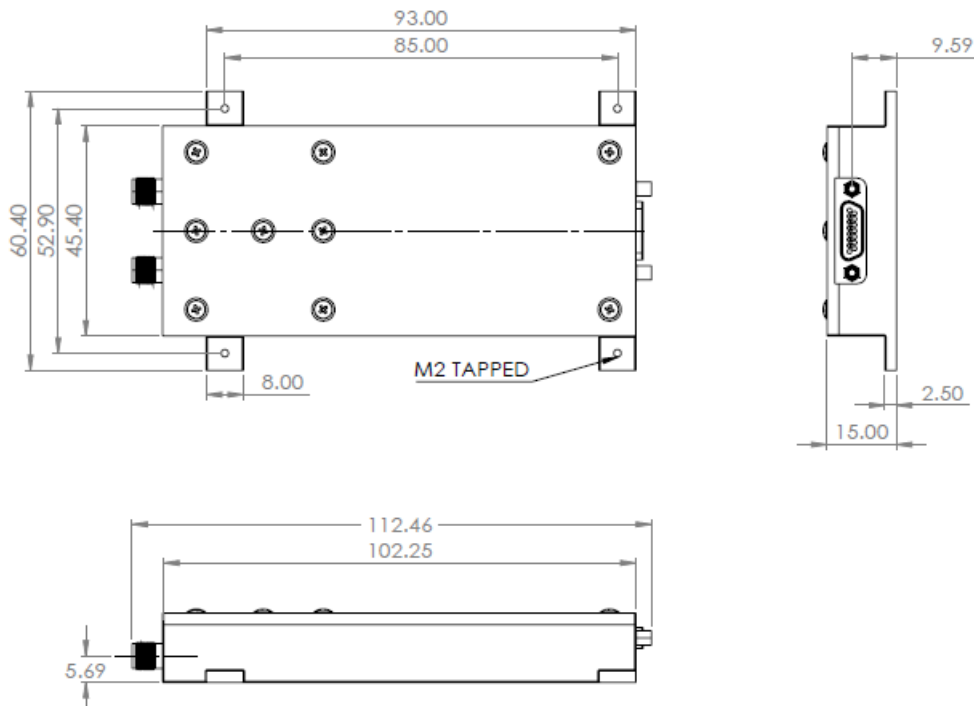
RF Parameters		
VAT60KX-435016		K5K5
Frequency Range		1-24 GHz
RF Connectors		50Ω 2.92mm
Insertion Loss (dB)*	Max	7.0
Attenuation Range (dB)		0-60
Attenuation Step Size (dB)		0.5
Return Loss (dB)	Min	8
Input P0.1dB (dBm)	Min	27
Input IP 3 (dBm)	Typ	50
Performance at 25°C *At 0dB Attenuation Setting		

Environmental		
Operating Temperature		-20°C to +65°C
Storage Temperature		-20°C to +65°C
Location		Indoor use Only
Humidity	Max	85% non-condensing
Altitude	Max	10,000 feet

Max Operating Parameters	
RF Power on Input	25 dBm
RF Power on Output	16 dBm
DC Voltage	12 –20V
DC Current	N/A
DC Consumption	250 mA

! Operation beyond these limits may cause instantaneous and permanent damage.

Physical Dimensions (mm)



Broadcast



Marine Oil & Gas



SNG & VSAT

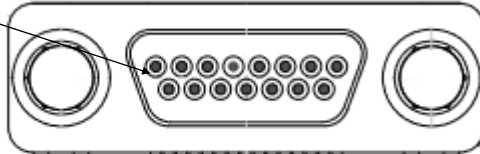


Satellite Teleport



Connector pin-out and control information

Pin 1



Pin Descriptions		
Pin Number	Function	Description
1	0.5dB bit	Pins are internally pulled up to 3V3, connect each pin to ground to activate the attenuator bits. Leave all pins open/pulled high for max gain. 32dB bit pin only applicable on units with >30dB attenuation range. Must be left unconnected otherwise.
2	1dB bit	
3	2dB bit	
4	4dB bit	
5	8dB bit	
6	16dB bit	
7	32dB bit or N/C	
8	Alarm	Open-drain alarm. Pin is internally shorted to ground when an internal fault is detected. 250mA max current sink to this pin.
9	Serial +	Serial data +ve pin (RS-485/422).
10	GND	Must be connected to DC ground.
11	Serial -	Serial data -ve pin (RS-485/422).
12	N/C	Must be left unconnected.
13	GND	Must be connected to DC ground.
14	+V in	Supply voltage (12-24V DC).
15	+V in	Supply voltage (12-24V DC).

! When using serial control to set the gain, all parallel control pins (pins 1-7) must be left unconnected or pulled high. If one of these pins is connected to ground then it will overwrite the last serial command setting. The parallel pins must all be set to N/C or pulled high again before another serial command can be sent.

Broadcast



Marine Oil & Gas



SNG & VSAT



Satellite Teleport

