

**CDAT-1G2G-64-8** is an digital controlled attenuator that operates over the 1.0 GHz to 2.0 GHz frequency range. This model utilizes 8 bits control, the corresponding attenuation is 0-64 dB.

Features:

- Very wide band operation 1.0-2.0 GHz
- 0.25 dB LSB Steps to 64 dB
- Single Positive Control Line Per Bit

### Specifications:

Frequency Range:	1.0-2.0 GHz	
Attenuation Range:	64 dB	
Insertion Loss:	4.0 dB Max	
Attenuation Accuracy:	+/-0.4 dB	@0-16 dB
	+/-0.6 dB	@17-32 dB
	+/-1.2 dB	@32-64 dB
VSWR:	2.0:1 Max	
Control Bits:	8 bits	
Least Significant Bit (LSB):	0.25 dB	
Control Logic:	TTL	
Power Handling:	+20 dBm CW Max	
Power Supply:	+5 V @ 300 mA Typ	
	-5 V @ 300 mA Typ	
Switching Time:	600 ns Typ	

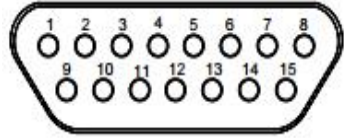
### Environmental Ratings:

Temperature:	-25°C to +85 °C Operating
	-55 °C to +125 °C Non-Operating
Vibration:	MIL-STD-202F, Method 204D Cond. B
Altitude:	MIL-STD-202F, Method 105C Cond. B
Temperature Cycle:	MIL-STD-202F, Method 107D Cond. A


### Mechanical Specifications:

Parameter	Specification
Dimensions WxHxD	5.00X3.00X0.75 inches
RF Connectors In/Out	SMA-Female
DC Connector	D-SUB 15 Pin (Male)
Material	Aluminum

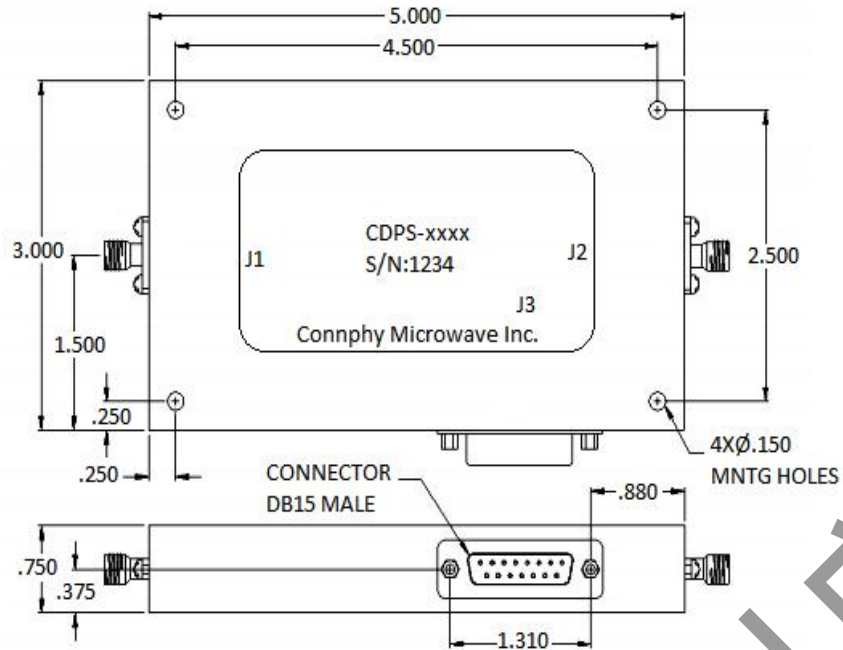
### DC Connector PIN Assignment:

Pin	Function	Pin Definition
1-8	Bit1-Bit8	
9-12	NC	
13	+5V	
14	-5V	
15	GND	

### Digital Control PIN Attenuators CDAT-1G2G-64-8

DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 <a href="http://www.connphy.com">www.connphy.com</a> <a href="mailto:sales@qiidao.com">sales@qiidao.com</a>
CHECKRD:	DATE: 08/07/15	SHEET : 1 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	
			Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.

## Mechanical Outline (Inches):



## Truth Table :

Control Voltage TTL Input for 8 bits resolution								Attenuation
Bit 8	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	
0	0	0	0	0	0	0	0	Reference
0	0	0	0	0	0	0	1	0.25 dB
0	0	0	0	0	0	1	0	0.5 dB
0	0	0	0	0	1	0	0	1 dB
0	0	0	0	1	0	0	0	2 dB
0	0	0	1	0	0	0	0	4 dB
0	0	1	0	0	0	0	0	8 dB
0	1	0	0	0	0	0	0	16 dB
1	0	0	0	0	0	0	0	32 dB
1	1	1	1	1	1	1	1	64 dB

## Environmental Ratings:

Temperature: -25°C to +85 °C Operating  
 -55 °C to +125 °C Non-Operating


Vibration: MIL-STD-202F, Method 204D Cond. B

Altitude: MIL-STD-202F, Method 105C Cond. B

Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

### Digital Control PIN Attenuators

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CHECKRD:	DATE: 08/07/15	SHEET : 2 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	
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