

**CDAT-1G18G-60-8** is an digital controlled attenuator that operates over the 1.0 GHz to 18.0GHz frequency range. This model utilizes 8 bits control, the corresponding attenuation is 0-60 dB.

Features:

- Very wide band operation 1.0-18.0 GHz
- 0.25 dB LSB Steps to 60 dB
- Single Positive Control Line Per Bit

### Specifications:

Frequency Range:	1.0-18.0 GHz	
Attenuation Range:	60 dB	
Insertion Loss:	6.8 dB Max	
Attenuation Accuracy:	+/-0.8dB	@1-20 dB
	+/-1.80 dB	@20-40 dB
	+/-2.50 dB	@40-60 dB
VSWR:	1.8:1 Max	
Control Bits:	8 bits	
Least Significant Bit (LSB):	0.25 dB	
Control Logic:	TTL	
Power Handling:	+20 dBm CW Max	
Power Supply:	+12 to +15Vdc @ 150 mA	
Switching Time:	1us Typ	

### Environmental Ratings:

Temperature:	-40°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	2.5X2.0X0.51 inches
RF Connectors In/Out	SMA-Female
DC Connector	D-SUB 15 Pin (Male)
Material	Aluminum

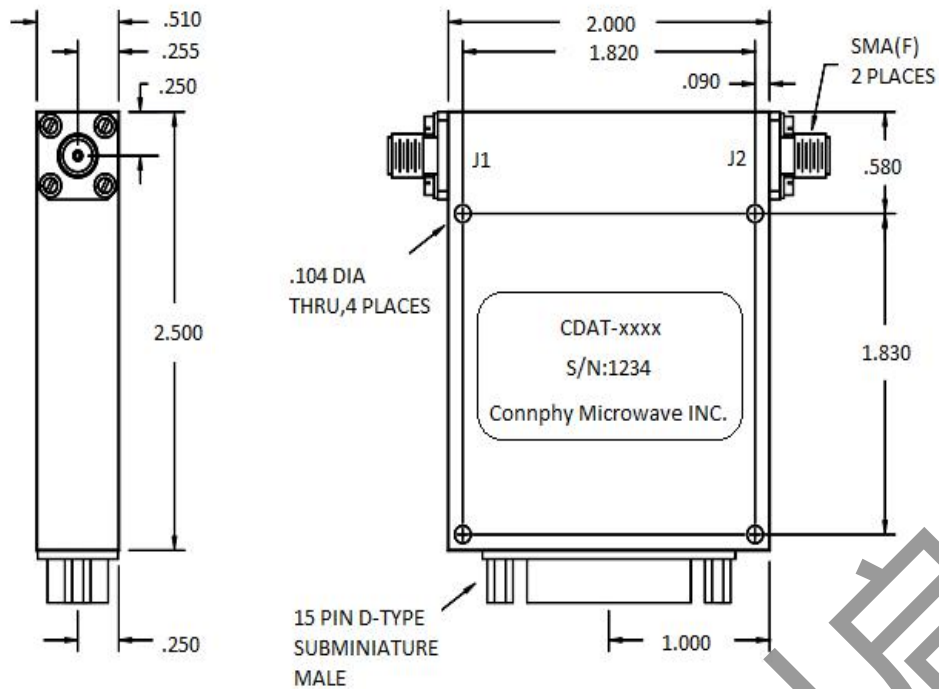
### DC Connector PIN Assignment:

Pin	Function	Pin Definition
1-4	NC	
5-12	Bit1-Bit8	
13	+VDC	
14	NC	
15	GND	

### Digital Control PIN Attenuators CDAT-1G18G-60-8

DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 www.connphy.com sales@qiidao.com
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

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## Digital Control PIN Attenuators

### CDAT-1G18G-60-8

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