

SPECIFICATIONS

NOMINAL IMPEDANCE: 50 Ω

FREQUENCY RANGE: dc to 2.0 GHz: 3200T-1, 3200T-2, 3201T-1, 3201T-2, 3205T-X, 3206T-1, 3209T-1
 dc to 3.0 GHz: 3200T-1E, 3200T-2E, 3201T-1E, 3205T-XE, 3206T-1E, 3209T-1E

DRIVER INTERFACE:

Input Supply Voltage: +12.0 to +15.0V

Control Signals: TTL/CMOS compatible

Interface Modes: parallel/ I²C serial

DC Characteristics (at 25 °C):

Digital Interface:

Parameter	Specification
V _{IL} Low Level input:	-0.5 min, 0.8V max
V _{IH} High Level input:	2.0 min, 5.25V max
I _{PU} Pullup Current	50 μ A min, 400 μ A max

Power Supply:

V _{IN} Supply Voltage:	+12.0 to +15.0V
I _{IN} Supply current:	25 mA
I _{CELL} Supply Current:	15 mA (2 GHz Units)
(per cell, continuous)	30 mA (3 GHz Units)

POWER RATING: 1 watt average to 25°C ambient temperature, derated linearly to 0.25 watt @ 71°C. 50 watts peak (5 μ sec pulse width; 1% duty cycle)

POWER COEFFICIENT: < 0.005 dB/dB/watt

RATED SWITCH LIFE: 5 million cycles operations per cell @ 0 dBm

CYCLING RATE: 5 Hz maximum per relay

SWITCHING TIME: 6 mSEC maximum @ nominal rated voltage

RELEASE TIME: 3 mSEC maximum

TEMPERATURE: 3200T, 3201T: -20° to +70°C
 3205T, 3206T,
 3209T

MONOTONICITY: 3200T, 3201T: 10 MHz to 2.0 GHz (minimum of 1 dB change)
 3205T, 3206T,
 3209T

3200T-1E, 3200T-2E, 3201T-1E: 10 MHz to 3.0 GHz
 3205T-XE, 3206T-1E, 3209T-1E

INCREMENTAL TEMPERATURE COEFFICIENT:

30 & 32 dB cells: 0.0005 dB/dB/°C
 All other cells: 0.0002 dB/dB/°C

MAXIMUM INSERTION LOSS (dB):

Frequency Range (GHz)	3200T-1 3200T-2	3200T-1E 3200T-2E	3201-1 3201-2	3201T-1E	3205T-X	3205T-XE	3206T-1	3206T-1E	3209T-1	3209T-1E
dc - 0.5	2.75	2.50	1.80	1.70	1.80	1.50	2.00	1.50	3.50	3.00
0.5 - 1.0	3.40	3.20	2.40	2.20	2.30	1.75	2.60	2.00	4.50	3.50
1.0 - 1.5	4.00	3.50	3.00	2.50	2.80	2.00	3.10	2.50	5.60	4.00
1.5 - 2.0	4.50	4.00	3.75	2.80	3.30	2.25	3.50	2.80	6.70	4.50
2.0-3.0	---	4.70	---	3.25	---	2.60	---	3.70	---	5.50

RF INPUT CONNECTORS: Rugged female 3.5 mm which mate nondestructively with SMA male connectors per MIL-STD-39012.

INTERFACE CONNECTOR: 14 pin .025 square post header on .1 center. Mates with Amp connector 746285-2 or equivalent (one mating connector included with each unit).

CONSTRUCTION:

Housing: Aluminum

Connectors: Stainless steel body and beryllium copper contacts.

WEIGHT:	3200T	165 g (8.4 oz)
	3201T	132 g (7.3 oz)
	3206T	132 g (7.3 oz)
	3205T	132 g (7.3 oz)
	3209T	218 g (3.5 oz)

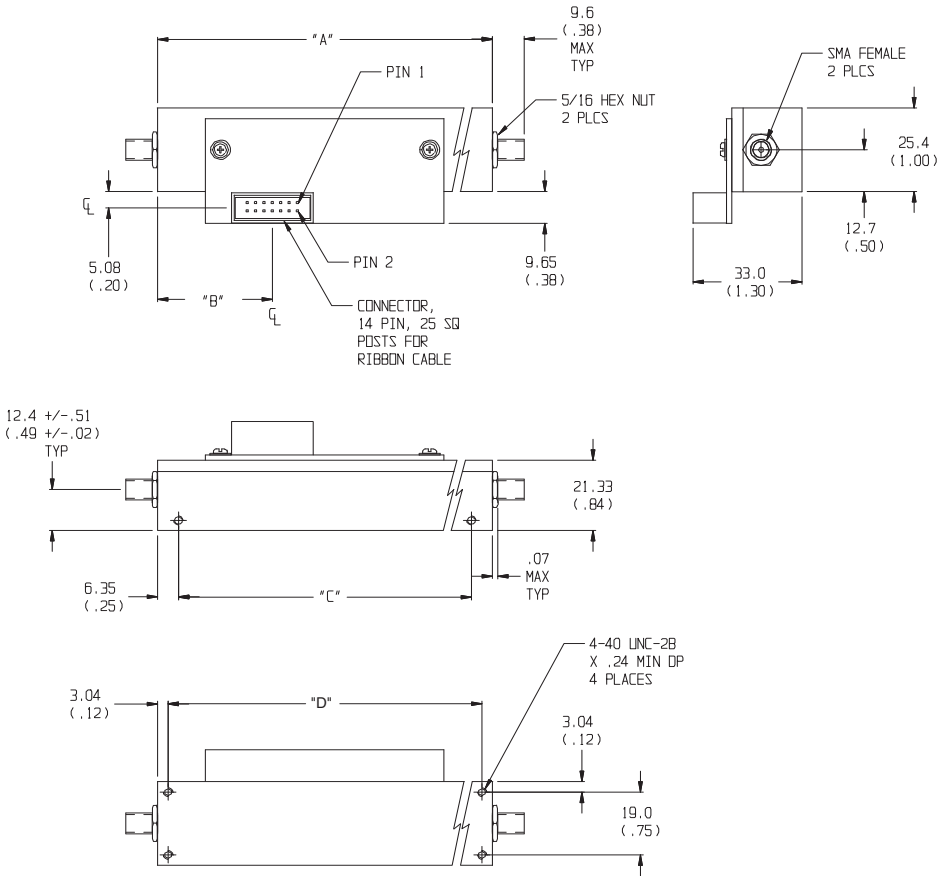
CONTACTING / Weinschel

In the event you're having difficulty or believe that the components are defective, please contact Weinschel immediately. An apparent malfunction may be corrected over the phone by contacting the Customer Service Department at Weinschel. DO NOT send the product back to the factory without prior authorization (RMA number). When it is necessary to return an item, state the symptoms or problems, catalog and type number of the attenuator, and date of original purchase. Also write the company name, your name, and phone number on an index card. Then attach the card to the attenuator to be returned.

For more information or any questions about your Programmable Step Attenuators and/or other Weinschel products, contact the Sales Department at API / Weinschel.

Physical Dimensions:

Model 3200T, 3201T & 3206T:

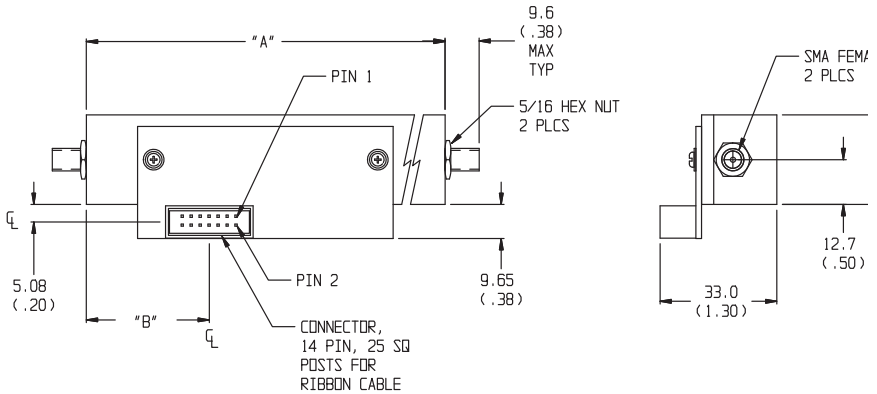


Model No.	No. Cells	A	B	C	D
3200T-X	8	101.6 (4.0)	31.8 (1.25)	88.9 (3.50)	95.2 (3.75)
3201T-X 3205T-X	5/4	76.2 (3.00)	19.1 (0.75)	63.5 (2.50)	69.8 (2.75)
3206T-X	6	81.3±0.5 (3.20±0.02)	21.46 (0.85)	68.6 (2.70)	75.18 (2.96)

NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.

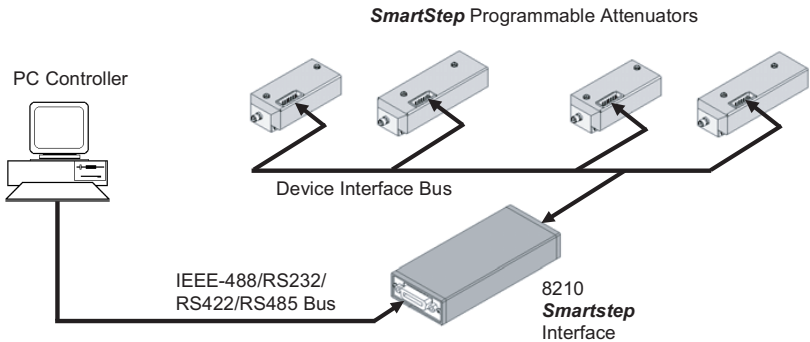
PHYSICAL DIMENSIONS:

Model 3209T:



ACCESSORIES

Model 8210A Smartstep Interface: The Model 8210A Smartstep Interface provides a flexible, low cost solution for the operation of programmable step attenuators and other electromechanical devices under computer control. Designed to interface to Weinschel's new line of Smartstep Programmable Attenuators, the 8210A represents a new concept in device control applications for bench test and subsystem designs. The 8210A provides a high-level interface from various industry standard communications interfaces, including IEEE-488/RS232/RS422/RS485, to the Smartstep's serial Device Interface Bus. Typical Setup shown below:



NOTE: All dimensions are given in mm (inches) and are maximum, unless otherwise specified.

API / Weinschel Warranty

PRODUCTS: API / Weinschel warrants each product it manufactures to be free from defects in material and workmanship under normal use and service anywhere in the world. API / Weinschel's only obligation under this Warranty is to repair or replace, at its plant, any product or part thereof that is returned with transportation charges prepaid to API / Weinschel by the original purchaser within ONE YEAR from the date of shipment.

The foregoing Warranty does not apply to, and in API / Weinschel's sole opinion, products that have been subject to improper or inadequate maintenance, unauthorized modifications, misuse, or operation outside the environmental specifications for the product.

SOFTWARE PRODUCTS: API / Weinschel software products are supplied without representation or Warranty of any kind. API / Weinschel, therefore, assumes no responsibility and will not accept liability (consequential or otherwise) arising from the use of program materials, disk, or tape.

The Warranty period is controlled by the Warranty document furnished with each product and begins on the date of shipment. All Warranty returns must be authorized by API / Weinschel prior to their return.

API / Weinschel's Quality System Certified to:



Intertek
Certificate 94-289k





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