

## Fixed and Level Setting Full Band Attenuators, STA Series

### FEATURES:

- ◆ Frequency coverage: 18 to 140 GHz
- ◆ Full band operations
- ◆ High attenuation accuracy
- ◆ Instrumentation grade



### APPLICATIONS:

- ◆ Test labs
- ◆ Instrumentation
- ◆ Subassemblies

### DESCRIPTION:

**STA series** full band attenuators are waveguide based attenuators of four types: fixed, level setting, direct reading and programmable. These attenuators are offered to cover the frequency range of 18 to 140 GHz.

**Fixed and level setting attenuators** are constructed with an E-plane resistive insert in the rectangular waveguide. The insertion loss of these attenuators is dependent on the frequency. The standard attenuation values for fixed attenuators are 3, 6, 10, 20 and 30 dB, and the attenuation range of level setting attenuators is adjustable from 0 to 30 dB via a micrometer. Fixed and level setting attenuators are typically used for signal attenuation when accuracy is not a focus.

### CATALOG MODELS (Fixed Attenuator):

Model Number	STA-AT-42-F2	STA-AT-28-F2	STA-AT-22-F2	STA-AT-19-F2	STA-AT-15-F2	STA-AT-12-F2	STA-AT-10-F2	STA-AT-08-F2
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-08
Frequency (GHz)	18.0 to 26.5	26.5 to 40.0	33.0 to 50.0	40.0 to 60.0	50.0 to 75.0	60.0 to 90.0	75.0 to 110.0	90.0 to 140.0
Attenuation (dB)	3, 6, 10, 20 and 30 dB, Full Waveguide Band							
Insertion Loss (dB)	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.6
VSWR	1.15:1	1.15:1	1.15:1	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1
Power Handling (W)	0.75	0.75	0.50	0.50	0.50	0.50	0.50	0.50
Insertion Length (")	4.0	3.5	3.5	3.5	2.5	2.5	2.5	2.5
Outline	TA-FK	TA-FA	TA-FQ	TA-FU	TA-FV	TA-FE	TA-FW	TA-FF

Note: The "AT" in the model numbers is for the attenuation value. For example, STA-06-10-F2 is a WR-10 fixed waveguide attenuator with a 6 dB attenuation value.

### CATALOG MODELS (Level Setting Attenuator):

Model Number	STA-30-42-M2	STA-30-28-M2	STA-30-22-M2	STA-30-19-M2	STA-30-15-M2	STA-30-12-M2	STA-30-10-M2	STA-30-08-M2
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-08
Frequency (GHz)	18.0 to 26.5	26.5 to 40.0	33.0 to 50.0	40.0 to 60.0	50.0 to 75.0	60.0 to 90.0	75.0 to 110.0	90.0 to 140.0
Attenuation (dB)	0 to 30 dB, Full Waveguide Band							
Insertion Loss (dB)	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.6
VSWR	1.15:1	1.15:1	1.15:1	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1
Power Handling (W)	1.00	1.00	0.75	0.50	0.50	0.50	0.50	0.50
Insertion Length (")	4.0	3.5	3.5	3.5	2.5	2.5	2.5	2.5
Outline	TA-MK	TA-MA	TA-MQ	TA-MU	TA-MV	TA-ME	TA-MW	TA-MF

Note: The standard level setting attenuators are equipped with a micrometer.