

Model 8853

RF ATTENUATION MEASUREMENT

- Used in 8850 to measure attenuation in 18-40 GHz range
- Only requires a 6-13 GHz signal source
- 90 dB dynamic range with +0.04 dB/10 dB accuracy when used in 8850 system.
- SWR < 1.6
- Rack mount kit available

Frequency Converter 18 to 40 GHz

Extends Your VM-7 Capabilities to 40 GHz in Coax

The Model 8853 Frequency Converter is intended for use with any TEGAM Model VM-7 Attenuator/Signal Calibrator to create an 18 to 40 GHz measurement system. This Frequency Converter downconverts the 18 to 40 GHz measurement signal to a 30 MHz IF signal which can be measured by the VM-7. Using the Model 8853 with the Model 8852 Frequency Converter will allow the user to measure attenuation from 0.01 to 40 GHz without the use of an additional LO source. Figure 1 shows a typical Model 8853 Measurement System setup.

This instrument can be easily stacked with other TEGAM instru-

ments or mounted in any cabinet or rack designed according to EIA RS-310 and MIL-STD-189 using the appropriate rack mounting kit.

Weinschel PLANAR CROWN® Connector System

The use of Weinschel PLANAR CROWN® connectors at the INPUT connectors provides the Model 8853 user with easy exchange of connector types and eliminates the need for adapters and other devices that would create additional insertion loss. This "Torque Free" type of connector also provides quick replacement of defective connectors. All crowns will mate nondestructively with connectors per MIL-STD-39012 (refer to Weinschel PLANAR CROWN® data sheet for more details).



Prices and specifications subject to change without notice.

TEGAM®

YOUR GLOBAL SOURCE FOR TEST
AND MEASUREMENT SOLUTIONS

Model 8853

FREQUENCY CONVERTER

Specifications

Frequency Range	Signal port	18 to 40 GHz
	RF In	6 to 13.333 GHz
	LO In	5.99 to 13.323 GHz
	IF Out	30 ± 2 MHz
RF Signal Levels	RF Input	+5 dBm nominal, +10 dBm maximum
	LO Input	+7 ± 2 dBm, +10 dBm maximum
	Signal Port	-2 dBm maximum, -10 dBm minimum
Nominal Impedance	50 Ω	
Input Load SWR	<1.6	
Connectors	RF Input	SMA Female
	LO Input	SMA Female
	30 MHz OUTPUT	Type-N Female
	Test Port	PLANAR CROWN 2.92 mm Female
	Signal Port	PLANAR CROWN 2.92 mm Female
Subharmonic	-55 dBm	
Warm-up Period	3 hours minimum	
Input Power Requirements	100, 120, 220, 240 VAC ± 10 % @ 50 to 60 Hz	
Power Consumption	180 Watts	
Design and Construction	Designed to meet requirements of MIL-STD-28800D TYPE III, CLASS 5, STYLE E	
Temperature	Operating	+10 °C to +40 °C (+50 °F to +104 °F)
	Storage	-40 °C to +75 °C (-40 °F to +167 °F)
Humidity	95 %	
Physical Dimensions	Height	88.9 mm (3.5 in)
	Width	425 mm (16.75 in) standard rack width
	Depth	520.7mm (20 in)
	Weight	10.66 kg (23.5 lb)
Included Accessories	Power Cord	P/N 068-21
	Manual	P/N IM236
	Accessory Cable Kit (3 RF Cables)	P/N 192-3009
Optional Accessories	Rack Adapter Kit	R/N 190-2220
	Z540 Compliant Calibration with Certificate and Data for 8853	P/N OPT-Z540

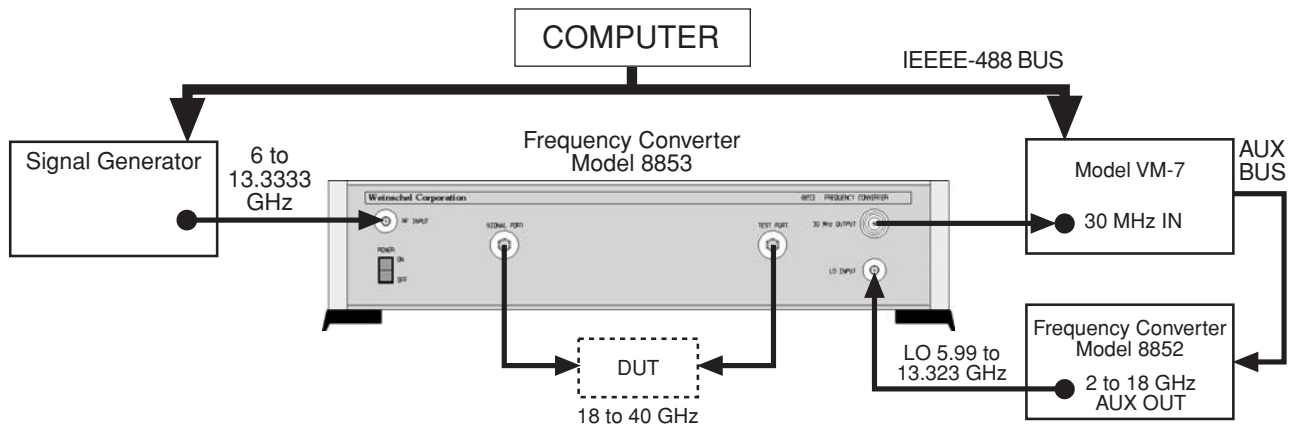


Figure 1. 8850/8853 (18-40 GHz) Measurement System