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C A T V  
Multi - Carrier  
Rack-Mount RF Test Signal  
**Generator**  
Model 1685

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# CATV Multi-Carrier RF Test Signal Generator Model 1685

## System Alignment Generator

Spectrum Analyzers are useful for system frequency-response testing. The cable system's video carriers act as stimuli and the spectrum analyzer measures the response at any point in the cascade of amplifiers. The beauty of this technique is that there is no subscriber interference. The shortcoming is that if your system is not carrying channels throughout the passband, the spectrum analyzer has nothing to measure. Using a 1685's CW continuous wave test signals provides stable, clean stimuli for frequency response testing that won't interfere with existing channels.

Front



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## 1685 SPECIFICATIONS

	Frequency (MHz)		
	5-860	861-1000	1001-1200
Max output level (dBmV)			
1 to 2 carriers .....	+59	+57	+55
3 to 4 carriers .....	+55	+53	+51
5 to 6 carriers .....	+52	+50	+48
7 to 8 carriers .....	+50	+48	+46

Optional Built-in Attenuator .....0 to 70 dB in 10 & 20 dB steps

Individual amplitude adjustment: 0 to -13 dB

Amplitude stability .....±0.5 dB/setting

Spectral purity

(spurious & harmonic).....≥60 dBc

Residual hum .....≤0.01%

Frequency accuracy.....≥0.01% kHz (10 MHz to 1200 MHz)  
±1.0 kHz (5 MHz to 10 MHz)

Output impedance ..... 75 Ω

Size (W x H x D) ..... 1.75" x 19" (std. rack) x 12.5"  
(4.5cm) x (48.3cm) x (31.8cm)

Power ..... 100-240 VAC, 50-60 Hz

Certifications .....CE

*Specifications subject to change without notice.*

### STANDARD ACCESSORIES

- User operation manual
- AC power line cord

## 1685

The Model 1685 is a headend/hubsite RF multi-carrier generator. Each CW carrier can be activated individually or simultaneously. The RF carriers generated are extremely clean and stable, thus making the 1685 an ideal instrument for testing/aligning the CATV forward path (downstream) band.

### Features:

- Up to eight individually or simultaneously activated RF carriers
- Spectral purity in excess of 60 dB allows for accurate hum and noise evaluation without interference
- Configurable with a combined single output connector, or a separate dedicated output connector for each test signal

### CATV Applications:

- System alignment
- Carrier-to-noise measurement
- Carrier-to-hum modulation

Designed and Manufactured by:

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