

"Results You Can Count On"

# Model 700 Series Multi-Standard/Multi-Channel Local Loop Simulators with Optional AWGN

- Multiple wire types to choose from:
  - 26 AWG PIC as specified in ANSI T1.417
     (0 to 24,000 ft/25-ft steps)
  - 0.4mm PE as specified in ETSI TS 101 388
     (0 to 9,000 m/10-m steps)
  - TP100 as specified in ETSI TS 101 270-1 & G.992.5 Annex M

(0 to 9,000 m/10-m steps)

- Bandwidth DC to 30 MHz
- Solution for ADSL, ADSL2, ADSL2+, & VDSL2 chip/modem/DSLAM testing
- Highly accurate, lab grade unit with fine increments for a variety of applications such as Bonding and Rate/Reach
- Order with/without variable AWGN for CO and/or CPE side of each loop



Available in 8, 12 and 16-channel versions

Order with or without variable AWGN

The Model 700 Series products are multi-standard/multi-channel local loop simulators and are the ideal solution for ADSL, ADSL2, ADSL2+, and VDSL2 chip/modem/DSLAM testing. The highly accurate models in this series are offered in several different configurations, including combinations of wire types, in 8, 12 or 16-channels.

The 700 Series models offer fine granularity and long line lengths. They may be ordered with or without the ability to inject variable AWGN on the CO and/or CPE side of each loop.



## Model 700 Series Multi-Standard/Multi-Channel Local Loop Simulators with Optional AWGN

### **Ordering Options**

#### Without AWGN Option

Model Number	Simulation					
	#Chs	Wire Type	Line Length/Increment	#Chs	Wire Type	Line Length/Increment
700-8-26	8	26AWG	0 to 24,000 ft/25-ft	-	-	_
700-12-26	12	26AWG	0 to 24,000 ft/25-ft	-	-	
700-16-26	16	26AWG	0 to 24,000 ft/25-ft	-	-	
700-8-04	8	0.4mm PE	0 to 9,000 m/10-m	-	-	
700-12-04	12	0.4mm PE	0 to 9,000 m/10-m	-	-	
700-16-04	16	0.4mm PE	0 to 9,000 m/10-m	-	-	
700-8-TP100	8	TP100*	0 to 9,000 m/10-m	-	-	
700-12-TP100	12	TP100*	0 to 9,000 m/10-m	-	-	
700-16-TP100	16	TP100*	0 to 9,000 m/10-m	-	-	
700-4-26-4-04	4	26AWG	0 to 24,000 ft/25-ft	4	0.4mm PE	0 to 9,000 m/10-m
700-6-26-6-04	6	26AWG	0 to 24,000 ft/25-ft	6	0.4mm PE	0 to 9,000 m/10-m
700-8-26-8-04	8	26AWG	0 to 24,000 ft/25-ft	8	0.4mm PE	0 to 9,000 m/10-m
700-4-04-4-TP100	4	0.4mm PE	0 to 9,000 m/10-m	4	TP100*	0 to 9,000 m/10-m
700-6-04-6-TP100	6	0.4mm PE	0 to 9,000 m/10-m	6	TP100*	0 to 9,000 m/10-m
700-8-04-8-TP100	8	0.4mm PE	0 to 9,000 m/10-m	8	TP100*	0 to 9,000 m/10-m

### **Ordering Options**

With AWGN Option (Variable AWGN on CO and CPE side of all loops)

Model Number	Simulation					
	#Chs	Wire Type	Line Length/Increment	#Chs	Wire Type	Line Length/Increment
700N-8-26	8	26AWG	0 to 24,000 ft/25-ft	-	-	_
700N-12-26	12	26AWG	0 to 24,000 ft/25-ft	-	-	
700N-16-26	16	26AWG	0 to 24,000 ft/25-ft	-	-	
700N-8-04	8	0.4mm PE	0 to 9,000 m/10-m	-	-	
700N-12-04	12	0.4mm PE	0 to 9,000 m/10-m	-	-	
700N-16-04	16	0.4mm PE	0 to 9,000 m/10-m	-	-	
700N-8-TP100	8	TP100*	0 to 9,000 m/10-m	-	-	
700N-12-TP100	12	TP100*	0 to 9,000 m/10-m	-	-	
700N-16-TP100	16	TP100*	0 to 9,000 m/10-m	-	-	
700N-4-26-4-04	4	26AWG	0 to 24,000 ft/25-ft	4	0.4mm PE	0 to 9,000 m/10-m
700N-6-26-6-04	6	26AWG	0 to 24,000 ft/25-ft	6	0.4mm PE	0 to 9,000 m/10-m
700N-8-26-8-04	8	26AWG	0 to 24,000 ft/25-ft	8	0.4mm PE	0 to 9,000 m/10-m
700N-4-04-4-TP100	4	0.4mm PE	0 to 9,000 m/10-m	4	TP100*	0 to 9,000 m/10-m
700N-6-04-6-TP100	6	0.4mm PE	0 to 9,000 m/10-m	6	TP100*	0 to 9,000 m/10-m
700N-8-04-8-TP100	8	0.4mm PE	0 to 9,000 m/10-m	8	TP100*	0 to 9,000 m/10-m

<sup>\*</sup> TP100 wire is the same diameter as 0.5mm wire



# Model 700 Series Multi-Standard/Multi-Channel Local Loop Simulators with Optional AWGN

Product Specifications				
Simulation	Accurately simulates attenuation and impedance			
	Full bidirectional operation at all specified frequencies			
	Wire Types Available			
	<ul> <li>26 AWG PIC as specified in ANSI T1.417</li> </ul>			
	<ul> <li>0.4mm PE as specified in ETSI TS 101 388</li> </ul>			
	<ul> <li>TP100 as specified in ETSI TS 101 270-1 &amp; G.992.5</li> <li>Annex M</li> </ul>			
Bandwidth	DC to 30 MHz			
Attenuation Accuracy (when source and load impedances are 100 ohms)	MAE < 1 dB 20 kHz to 30 MHz			
Maximum Attenuation	> 90 dB			
Impedance Accuracy	Typically +/- 10% 20 kHz to 30 MHz			
Maximum Voltage Tip – Ring	200 V			
Maximum Current	130 mA			
Connectors	Front: 16, 24 or 32 RJ-45's (2 for each loop, for CO/CPE connection)  Back: RS-232: DB9 female (DCE); GPIB:IEEE488 24-pin connector. Ethernet: RJ-45			
Optional White Noise (AWGN)	-90 dBm/Hz to -145 dBm/Hz in 0.25-dBm increments			
Controls	Keypad for setting loop lengths and IEEE-488 address, RS-232, or Ethernet communication parameters.			
Indicators	Backlit LCD display of line length and set up parameters.			
Power	88 to 264 VAC, 50 or 60 Hz			
Size	[7U] 19 in W x 22 in D x 12.22 in H (482.6 mm W x 558.8 mm D x 310.4 mm H)			
Environmental	Operating: +32 F to +122 F (0 to +50 degrees C) Storage: 0 to 95% relative humidity (non-condensing)			

Specifications are subject to change without notice. Made in USA.