

# Clarity™ 110

## Test and Measurement



The Clarity™ 110 test cable boasts steel torque crush and overbend protection with abrasion resistance - without compromising flexibility. The cable is ultra-stable through 110 GHz with exceptionally low attenuation. The design includes an ergonomic, stainless steel protective barrel strain relief and a hex coupling nut.

### Features:

- Broad Frequency Response
- Rugged & Durable
- Phase Stable Over Temperature
- Long Flex Life

### Specifications

$\Omega$  Impedance  
50 Ohms

Op Temp  
-67 to 257°F  
-55 to 125°C

#### Units

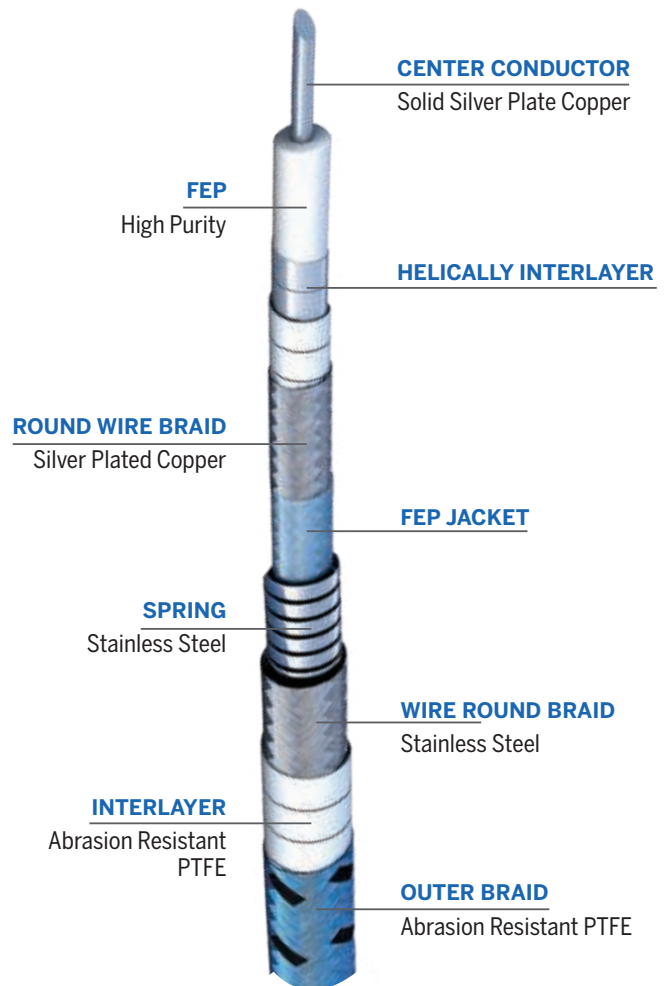
	Units	
Armored Diameter: armor	in (mm)	0.19 (4.70)
Armored Diameter: strain relief	in (mm)	0.31 (8.00)
Minimum Bend Radius armored	in (mm)	1.0 (25.4)
Minimum Bend Radius max flex life	in (mm)	2.0 (50.8)
Crushing (armored version)	lbs/lin.in	200
Flex Life		>50000
Velocity of Propagation	%	70
Shielding Effectiveness	dB	>100
Capacitance	pF/ft (pF/m)	29 (95)
VSWR Typical		1.40:1
VSWR Max		1.45:1
Phase Stability typical*	°	+/- 2
Amplitude Stability typical*	dB	+/- 0.075

\*The assembly is terminated with a short circuit and bent 90 degrees around the mandrel of 1-inch radius.

### Attenuation @77°F (+25°C)

Frequency GHz	dB/100 ft	dB/100 m
110	500	1640

Attenuation (per 100ft) at any frequency:  
 $1.0932 * \sqrt{f(\text{MHz})} + 0.00125 * f(\text{MHz})$



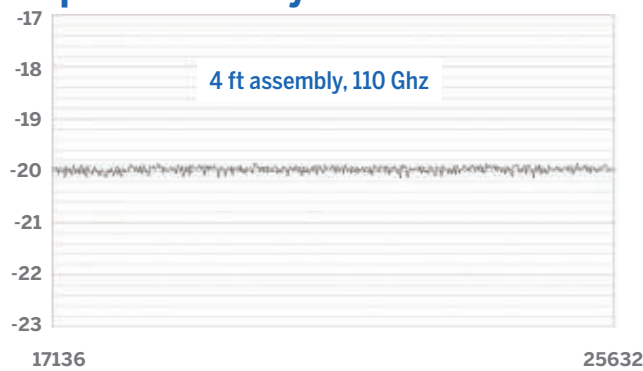
## Ordering Guide

**CLS110 -10M 10M -10.00M**

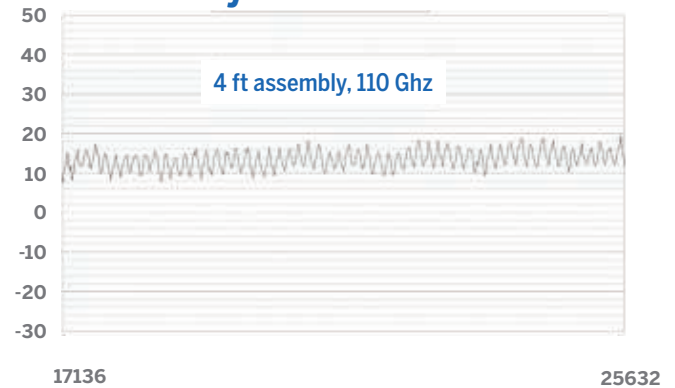
- Connector A      Connector B -      Length      M Meters  
F Feet

CODE	Description
10M	1.0mm Male Connector
10F	1.0mm Female Connector

### Amplitude Stability While in Motion



### Phase Stability While in Motion



Our flex test method uses 4ft cables at 110GHz. The testing equipment calibration occurs every 8 hours. Email us at [techquestions@timesmicro.com](mailto:techquestions@timesmicro.com) to obtain a copy of the test procedure specifications and results.



Global manufacturing capability: US, and Asia.



Heritage—in the air and on the ground, thousands of assemblies built over decades.



Assembled and tested assemblies provide assured performance.