



Trilithic 720 DSP Specs Provided by www.AAATesters.com

- Simplify Installation, Troubleshooting & Home Certification of Both Residential and Business Installations
- 1 GbE SFP Optical & Electrical Ethernet Throughput Testing and 802.11 b/g/n (2.4/5 GHz) Wireless Testing
- Intuitive Color Touch Screen with Simple Pass/Fail Indicators Reduce Installer Entry Errors and Improves Decision Making
- Next-Generation Autotest Apps Streamline Certification
- Convenient Multiple Standard Tests in a Single Autotest App Help to Standardize Tech Processes & Procedures



Business service installation, troubleshootng and verification all in one compact, powerful device

The Standardization Solution

Trilithic's 720 DSP[™] conveniently combines CATV and Gigabit Ethernet testing along with 802.11 b/g/n wireless in a single meter for troubleshooting and installation of both residential and business services.

Multi-service verification can now be achieved with one instrument containing everything needed for service, business, or residential installations. Eliminate the need for multiple instruments in most business services with Gigabit Ethernet Throughput testing and save capital expenditures at the same time.

Tailored for the challenges faced by installers, contractors and service techs, the 720 DSP comes equipped with all of the powerful troubleshooting tools for the experienced tech, yet helps simplify decision making and streamline standard processes and procedures for the more novice tech. This results in more efficient technicians, greater overall system health and allows techs to continue using the same meter as they become more experienced.

Gigabit Ethernet Testing

Used in combination with either the MetroNet 5001[™] or TLB-GbE[™], the 720 DSP can achieve throughput testing speeds of up to 1 GbE using either dedicated test port.

The 720 DSP can perform either roundtrip or one-way measurements of Key Parameter Index (KPI) for full Ethernet service testing. With constant payload testing for Layer 2 through Layer 4, the 720 DSP is built for verification of both Ethernet Service Level Agreement (SLA) and Quality of Service (QoS) metrics.

Next Gen Features

The 720 DSP features an intuitive color touch screen interface, simple pass/fail indicators, and powerful autotest apps to streamline certification and make the technician's job easier.

Everything about this next-gen meter was built with the business technician in mind, from the long battery life and quick charge time to its unique built-in LED flashlight and glow in the dark keypad for those dark cramped spaces.

With its next-generation smart device technology, the 720 DSP is the easiest to use, most feature-rich, best-performing meter available for installation and troubleshooting of business customer accounts.

TRILITHIC

720**dsp**

AVAILABLE MODELS:

- 720 DSP US (6 MHz)
 P/N 2011703XXX
- 720 DSP EURO (6/8 MHz)
 P/N 2011704XXX

OPTIONS:

- Bluetooth Communications Adapter (BCA)
 P/N 2011670002
- QAM Error Vector Spectrum (EVS) Analysis
 P/N 0930207006
- Source Generator (SRC)
 P/N 0930207007
- Traffic Control Plus (TCP)
 P/N 0930207009
- CM Sweep (CMS)
 P/N 0930207008

STANDARD INTERFACES:

- RF Test Port (F-Type)
- DOCSIS 3.0 modem 8x4 (100/304 Mbps)
- RJ45 Management Port (10/100 Mbps)
- Cable Modem Thru RJ45
- RJ45 Electrical Ethernet & SFP Optical Ethernet Test Ports (10/100/1000 Mbps)
- 802.11 "b/g/n" 2.4/5 GHz Wi-Fi
- USB 2.0 Flash Drive Port

The 720 DSP supports a variety of functions, including:

- Multi-user support
- Multi-language support
- Create jobs right on the meter
- Built-in web browser, real-time data transmission
- Interactive autotesting apps

Simple Yet Powerful

Providing the widest range of standard functions for an installer available today, the 720 DSP includes virtually all the testing options an installer or service technician needs to verify service quality and easily identify and fix problems in the field.

Troub	leshoot		7.1 V 📑	10-Sep-2015 12:59:11
Level	Scan	Tilt	Spectrum	CM Stat
UP LD	Net Tests	Gige	FDR	QAM EVS
Traffic Plus	CM Sweep			
Single Chan Autotest		shoot	Setup	0.2.100.136 Utility

STANDARD TESTING FEATURES:

- Return Spectrum Analysis (4 to 110 MHz)
- Level Measurement
- C/N Measurement
- QAM Measurement (MER/BER/Constellation/EQ)
- Complete Channel Plan Scan with Tilt Measurement
- Ping, Trace Route, VoIP & Throughput Measurements
- Cable Modem Statistics
- Full Spectrum Analysis (5 to 1000 MHz)
- Frequency Domain Reflectometer
- Analog & Digital HUM Measurement
- Upstream Linear Distortions Measurement
- Auto Discovery of Channel Plans



Autotest Apps

The 720 DSP features next generation autotest applications that practically walk the technician through a job. By performing standardized measurement tests at various required locations on the job site using user set test plans, channel plans and limit sets, the meter very clearly indicates (using color and symbols) what areas still need attention, before the technician leaves the job site.



Multi-user support allows technicians that work in various territories to easily switch channel plans, standardized autotest apps, and test limits or login as a completely different user. Connecting to ViewPoint allows techs to upload job data in near real-time as well as transmit and receive channel plans, autotests, and firmware.

viewpo	oint	Meter 360120829		Tech ID 5453
Receive (2)		Send (4)		
Channel Plans	1/2	Jobs	2	
Limit Sets	0/5	Data Logs	1	
Autotests	1/2	Screen Shots	1	
Settings				
Ready				
				Sync

Leaving less room for entry error, this new, simple user interface can translate into less training and more efficient time in the field for techs. The 720 DSP comes equipped with all of the required troubleshooting tools for the advanced technician, it also offers a higher comfort factor for novice technicians, reducing decision making in the field, which can ultimately result in more productive work days and more satisfied customers.

Justify ROI

Field operations managers can now easily verify that all of their technicians are performing the proper tests and are doing so at the right place and time—in near-real time. The potential benefits include identifying techs who need additional training, improving team performance, reducing truck rolls, and cutting operating costs.

At a higher level ViewPoint can deliver simple, standardized, system-wide reports and dashboards that can help a director or VP of technical operations view the entire operation at a glance to gain information that can be used to reduce service and repeat trouble calls.

Jobs ViewPoint CalCheck Home Cert	Autotes	st	14.0 V	18-Dec-2013 14:58:45
	Jobs	ViewPoint	CalCheck	Home Cert
Job Management Menu	lob Managomo	nt Monu		
			Cabur	Line Street
Autotest Troubleshoot Setup Utility	Autotest	Iroubleshoot	Setup	Utility

Essentially, this integrated system approach allows cable operators to see much more of their certification operations and use the information in practical ways. The insights can enable them to identify both localized problems and high-level system issues to make decisions based on a clearer understanding of their overall operations and the associated ROI.

Combining 720 DSPs in the field with the new ViewPoint WFM Module in the back office, managers can view the health of their entire system—in near real-time, for total RF installation management.



STANDARD FEATURES

The 720 DSP includes all of the following features standard.

Multiple User Profiles

- Allows up to 5 technicians to share a 720 DSP
- Each technician has his or her own profile, which loads in completely different sets of channel plans, autotest, etc.

Simple Network Management

Choose between Ethernet,

Provides connection details

DNS

Wi-Fi, GigE, cable modem, or

Bluetooth connection methods

such as MAC, IP, gateway and

Velcor	ne to the 720 DSP	
	720-USER (3333) ACME Cable	
	Unused User (0000) Company	
Select your u	ser profile or create a new one	
Replace		Delete

Wi-Fi

13.9 V 👉 ^{18-Dec-20}

Blueto

GigE

Troubleshoot
Network Manager

Ethernet

ettings

00:02:7C:01:10:E0 10.1.35.116

255.255.0.0 10.1.50.19 trilithic.net, 10.1.1.17, 10.1.1.18

DOCSIS

SN GW DNS

Job Management

- Create and close out your jobs from this screen
- Shows what channel plan and how many tests have been run on a particular job

Name	Status	Tests	Channel Plan	
w14365	Open		greenwood	
w43327	Open	0	greenwood	
w88744	Open	0	indy	
w64431	Open	0	castleton	=
				C

LED Flashlight

- High intensity LED for working in dark spaces
- Control is provided through the Fuction menu for quick access from any screen

🛡 Naviga	ition	14.0 V 🥠	30-Jul-201 19:04:10
	Pause M	eter	
Browser	Toggle Flag	shlight	
	Screen Ca	pture	
	Network M	anager	
	Log Off L	Jser	
Web Browser	menu		

Easy Setup & Configuration

- Global configuration settings can be applied to all users of the device while other settings can be tailored to suit each user
- Setting adjustments can be locked out using the ViewPoint software

Global	User	Interface
Measure	Channel Plan	Limit Set
Ethernet	Cable Modem	Wi-Fi
Bluetooth	Gige	

Cable Modem Statistics

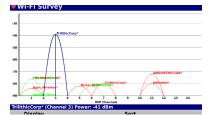
- Shows up to 8 downstream channels and 4 upstream channels
- Provides performance metrics for all downstream and upstream channels

Do	ownstream				Pass
ri	Frequency (MHz)	Rx Level	SNR	PreBER	PostBER
1	819.000 (256 QAM)	16.74 dBmV	39.9 dB	1.00E-08	1.00E-08 🔇
1	807.000 (256 QAM)	17.30 dBmV	39.0 dB	1.00E-08	1.00E-08 🥳
1	813.000 (256 QAM)	16.79 dBmV	39.4 dB	1.00E-08	1.00E-08 🤇
1	801.000 (256 QAM)	18.13 dBmV	39.4 dB	1.00E-08	1.00E-08 🥳

Press Up for Upstream Information Limit Set

N-Speed Wi-Fi with Survey Test Mode

- Built-in 802.11 "b/g/n" 2.4/5 GHz wireless adapter
- Actively view live signal strengths of Wi-Fi networks in the area
- Provides Wi-Fi details such as SSID, channel and power level



SFP Optical Power Measurement

- Provides the ability to measure the optical power through the optical transceiver
- Provides link speed, wavelength, Tx power and Rx power measurements of active SFP connection

re	SFP OPM		
•	Optical Power (dBm)	<u>ਾ</u> ੇ 1000	Mbps
x /e	-10 -15 -20 -25 -30 -35 -40 Tx Rx	Wavelength Tx Power Rx Power	850 nm -6.1 dBm -15.3 dBm
			Info



STANDARD FEATURES (CONTINUED)

The 720 DSP includes all of the following features standard.

Convenient Firmware Updates

 Easily update the meter firmware through the web or via USB to ensure you always have the latest features

-	rmware		7.4 V (
Package	V15.08.07.166	→	
Kernel	2.6.36-V15.08.03.01	-	
Library	V15.08.03.1	→	
Cable Modem	US3A:V13.1.8.1	→	
oftware component	nc. ("Trilithic") for the 1G DSP firm ts, media, printed materials, and	online* or elec	

Remote Access

- Remotely access the meter using any active network connection
- Control and monitor almost any function of the meter from your PC, smart phone, or tablet



INCLUDED MEASUREMENT FUNCTIONS

The 720 DSP includes all of the following measurement functions standard.

Analog Level Measurement

- Shows the analog channel and its associated measurements
- Provides Pass/Fail results for limit sets

Ref 10 dBmV	10 dB/Div	CH 4	СН4	
10	ŀ	CH 4	VID: 67.250 P	4Hz
-10		Pass	AUD: 71.750	MHz
-20 -30 -40				
-50		Level	2.2 dBmV	V
-60		Audio	-13.6 dBmV	
-70		Delta	15.8 dB	•
Video	Audio	C/N	48.2 dB	
Set the Chan	nel Number		Norm	al
Display	Channel F	Plan Limit 9	Set	

Single Frequency Level Measurement

- Shows the level of the analog carrier
- Displays the Carrier to Noise ratio of the analog carrier

0 dB/Div	СН	FREQ: 55.250 MHz
	Level	6.7 dBmV 52.2 dB
	C/N	Normal
		Level

Digital Level Measurement

- Shows the level, MER and BER of a QAM channel
- Users can change the display to view BER over time, Equalizer
 Tap and Constellation

	10		CH 120	DIG: 771	.000 MHz
	0		Dace	BW: 6.0	DOO MHz
to	-10		Pass	64 QAM	Annex B
-	-30			SR: 5.056	941 MSPS
	-40		Level	12.1 dB	mV 👩
	-50		Pre BER	1.00E-0	8 🧖
	-70		Post BER	1.00E-0	8 🧭
	Digi	tal	MER	37.5 dB	i 🧭
	Set the Chan	nel Numbe	r	N	ormal
	Display	Channel	Plan Limit Se	et	

QAM Constellation

- Shows the constellation diagram of the specified QAM channel
- Shows the level, MER and BER and provides Pass/Fail results for limit sets

	Le	ev	el							
						4		CH 120	Arris	
-							4	CH 120	DIG: 771.000	MHz
-			•	-	•	•	•	Dace	BW: 6.000 M	IHz
•	•	•	•	•	•	•	۰.	Pass	64 QAM Ani	iex B
٠			•	٠.	•	•			SR: 5.056941	ISPS
٠	•	٠		•	+	•	٠	Level	11.6 dBmV	
٠	٠	٠		٠	٠	٠	*	Pre BER	1.00E-08	
۰.	\$	٠	*	•	•	٠	*	Post BER	1.00E-08	
8	*	•	•	*		1	a.	MER	37.2 dB	- 🗸
Se	t ti	ne (Cha	nn	el I	lun	nbe	r	Norm	al
	Di	spl	ay		Ch	an	ne	Plan Limit Se	et	

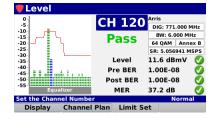
Analog & Digital HUM Measurement

- Measure the amplitude of 50/60 Hz, 100/120 Hz, and low frequency interference present on analog or digital channels
- Provides Pass/Fail results for limit sets

🛡 Level			CTA Base
HUM %	CH 119		
10	CH 113	DIG: 765	.000 MHz
9		BW: 6.0	00 MHz
7	_	256 QAM	Annex B
6	Pass	SR: 5.360	537 MSPS
4	50 Hz	0.4 %	0
3	100 Hz	0.4 %	Ø
	<1 kHz	2.8 %	0
50 100 <1K			
Set the Frequency			Normal
Display Channe	I Plan Limit Se	t	

Equalizer Tap Display

- Displays the equalizer stress and whether the SCTE specification is being broken
- Shows the level, MER and BER and provides Pass/Fail results for limit sets





INCLUDED MEASUREMENT FUNCTIONS (CONTINUED)

The 720 DSP includes all of the following measurement functions standard.

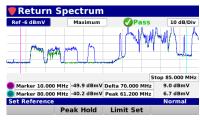
Bit-Error Rate Display

- Shows the BER on a graph with an adjustable measurement period
- Shows solid green lines for pre-errors and solid red lines for post-errors

th	Level	Plan : NCTA Base Limit : Tap			
	2.5 Min	utes	СН 9		
	Errors	00:00:54	СПЭ	DIG: 189.0	00 MHz
	100K			BW: 6.000 MHz	
	10K		_	256 QAM	Annex B
	1К		Pass	SR: 5.3605	37 MSPS
	100		Level	5.5 dBm\	/
r	10		Pre BER	1.00E-09	
	150 120 90 60 30 0		Post BER	1.00E-09	
	Se	conds	MER	40.4 dB	- 0
	Set the Char	nel Number	1		Normal
	Display	Channel	Plan Limit 9	Set	

Return Spectrum Measurement

- Provides the ability to view raw return spectrum traces from 4 to 110 MHz
- Fast DSP spectrum snapshots give the user extreme speed to capture fast transients on the upstream



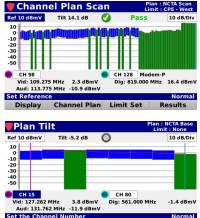
Full Spectrum Measurement

- Provides the ability to view raw forward spectrum traces from 5 to 1000 MHz
- Fast DSP spectrum snapshots give the user extreme speed to capture fast transients on the downstream

Ref 30 dBmV	Mode: S	tart/Stop		10 dB/Div
0				
o 10 pr/pros/W/W/W/W/W/W/W/ 10	workhontellighterspace	moning	pm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
		Vk	համ	ພາແມ່ປະເປັນມ
Start 5.000 MHz	3 MHz F	RBW	Stop 1000.000 M	
Marker 449.950 Mi	iz -5.7 dBmV	Delta 0.000	MHz	0.0 dB
Marker 449.950 Mi	iz -5.7 dBmV	Peak 824.25	MHz	9.2 dBmV
Set Reference				Normal
Mode D	etector	Favorites	1	Zoom

Scan & Tilt Measurement

- Full channel plan scan displays the frequency response of the entire channel lineup
- Provides Pass/Fail results for limit sets and color coded channels, green for digital and blue for analog
- Tilt shows the level difference between two selectable channels



Display Channel Plan Limit Set Results

Frequency Domain Reflectometer

- Determine the distance to cable faults (opens, shorts, splitters, etc.)
- Events shown on a distance versus amplitude display
- Markers to identify the distance and loss at the source of the reflection.

cable	🛡 FDR			Plan : NCTA Base Limit : Tap
ers.	Ref -13 dBRL	N	/oP 82.0 %	
,				36 Feet
		1		-13.70 dBRL
			ή 🔵	36 Feet
ce		1		-13.60 dBRL
				42 Feet
				-19.78 dBRL
	<i>μ</i>	-V /	-\ ●	81 Feet
ance	N	m	~~	-14.30 dBRL
ne	Set Referenc	e		
10	Zoom In	Preset	Off	Zoom Out

Gigabit Ethernet Testing

- Throughput testing speeds of up to 1 GbE using a dedicated test port
- Roundtrip or one-way constant payload testing for Layer 2-4 for verification of Ethernet SLA and QoS metrics

🛑 BERT 👘		Test Point : CPE
Rx fps	995784	
Rx Frames	20021102	Aggregate
Rx Utilization(%)	99.996 %	
Rx Line Rate	1.00 Gbps	<u>।</u>
Rx Data Rate	840.64 Mbps	
Tx fps	995784	1000 Mbps
Tx Frames	38034071	
Tx Utilization(%)	99.996 %	
Tx Line Rate	1.00 Gbps	
Tx Data Rate	840.64 Mbps	
		Running
		Stop



OPTIONAL FEATURES

The following optional features are available for the 720 DSP.

Source Generator

- Generate signals in the return path from 5 to 85 MHz
- Continuous wave (CW) or 16/32/64/128/256 QAM signal
- BER error injection for checking the bit stream

	256 QAM
	Amplitude
	30 dBmV
	Frequency
	50.000 MHz
	Symbol Rate
	5.12 MSPS
	BER
	0
Bit Error Rate	

Upstream Linear Distortions Measurement

- Used to determine if equalization is hiding potential problems within the upstream
- View the pre-equalization of the upstream channel, the in-channel frequency response and group delay, and the distance to the EQ taps

Ref 0 dB	Equalizer Taps	10 dB/Div	Channel: 1	
0	-		ID: 1	
10			18.100 MHz	
20			32.8 dBmV	
30	E L		5.120000 MSPS	
40				
50 ==			-1.37 usec	
60			-60.2 dB	
70			139.4 Meters	
80			3.12 usec	
			-53.2 dB	
	Equalizer		318.5 Meters	
elect Ups	tream Channel			

CM Sweep (Patent Pending)

- Uses the active cable modem built into the 720 DSP to align the upstream amplifiers
- No headend gear required, pre-EQ must be turned on at the CMTS

CM Sweep Refe									
Ref 8 dBmV	Gain -0.1 dB	Tilt 0.6	dB Tota	MQS -0.3 dB	2 dB/Div				
-	+								
6	-								
4	-								
2	-								
•	-	Hold State		-					
2				_					
•				_					
•			_	_					
•									
	-0.9 dB MQS	0.6 dB MQS	0.0 dB MQS	-0.4 dB MQS					
art 10.000 MH	Hz			Stop 4	5.000 MHz				
15.540 MHz	-0.1 d		41.200 MHz	0.5 d	BmV				
Bot	ak 0.6 dB	Valley -0.2	dB	P/V 0.8 dB					

Bluetooth Communications Adapter

- Remote control of the meter via a Class II Mini Bluetooth Adapter (v2.1) with a 10 meter range
- Connect to an iPad that has device tethering enabled by the service provider

DOCSIS	Ethernet	Ui-Fi	0 GigE	U Bluetoot			
MAC	00:02:72:3F:2F:4A						
IP SN	172.23.60.1(fe8 255.255.0	0::1456:dff:fed	id:ec8f/64)				
GW	255.255.255.0						
DNS	trilithic.net, 10.1	1.1.17. 10.1.1.	18				
5115							

QAM Error Vector Spectrum (EVS) Analysis

- Tune to downstream QAM channels to display Error Vector Spectrum (EVS)
- Display the ingress underneath an upstream cable modem channel, or any bursty signal
- Includes TraffiControl

QAM E	vs		Pla	n : NCTA Base
Ref 0 dB	CH 1	.20 /	rris	10 dB/Div
10 MER 36 dB				
20				
30				
40	8			
50				A
Sur house	man	m	hann	hann
Marker 768.4	72 MHz -61.7	dB Delt	a 0.000 MHz	0.0 dB
Marker 768.4	72 MHz -61.7	dB Peak	769.992 MHz	-37.1 dB
Set the Chan	nel Number			Normal
	Detector	Char	nnel Plan	

Traffic Control Plus

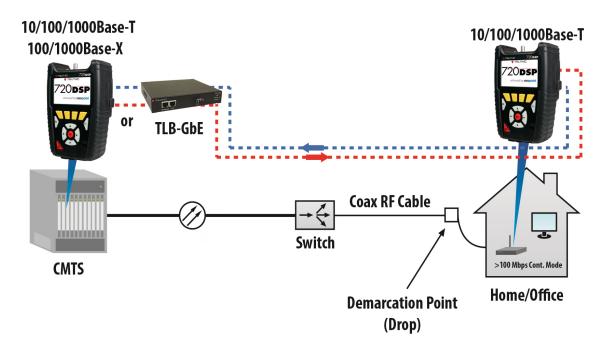
- Allows for a high-speed view of ingress in the upstream
- Heat map allows for simplified view of ingress hotspots

Ref 0 dBmV			10 di	B/Div
and the second second				
	participation of the second			
		+		
And the second second	And the second design of the s	-4 4 .		
farmer and the				
Start 4.000 MHz		St	top 65.000	MHz
9.700	MHz			
Peak: -46.0 dBn	V Max: -46.0 dBmV	Avg	: -59.0 dBm	۱V
Set Reference				
Save Data			Setting	as



FULL ETHERNET SERVICE TESTING

The Gigabit Ethernet testing feature works in combination with a loopback device to perform BERT loopback measurements of Key Parameter Index (KPI) for full Ethernet service testing.



720**dsp**

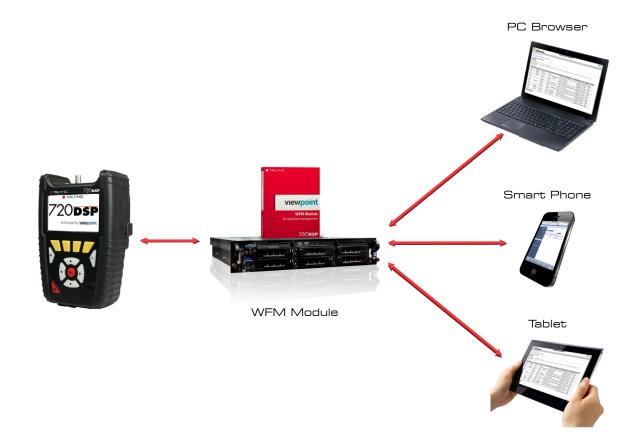
TOTAL SYSTEM MANAGEMENT

Combining the 180 DSP, 360 DSP, 720 DSP & 1G DSP meters in the field with the new ViewPoint Integrated Server in the back office, managers now have simplified access to intelligent management tools for monitoring, assessing and improving the efficiency of their total operation while making it even easier to obtain consistent, repeatable results that give supervisors that birds-eye view of the field for Total System Management.



By unifying an entire MSO's field operations in one convenient dashboard, managers can easily verify compliance and quality throughout the entire plant, either by home, system, region, division, or any other attribute from a billing system.

This simple and completely customizable integrated system of field analysis and reporting tools allows managers to watch over their entire field operations in one dashboard, comparing each location in the system, analyzing the overall health of their entire organization, and addressing concerns in near real-time.





STANDARD MEASUREMENT SPECIFICATIONS

Level Measurement

Channel Bandwidth EURO Models: 8 MHz Amplitude Range 40 dBmV to 450 dBmV Modulation Types Digita: 1632/64/128/256 QAM Amex A, 64/256 QAM Amex B Analog Measurement 40.75 dB @ 77 'F (25 'C) 42.0 dB from 0 to 122 'F (18 to 50 'C) Accuracy 40.75 dB @ 77 'F (25 'C) 42.5 dB from 0 to 122 'F (18 to 50 'C) Resolution 0.1 dB Spectrum Measurement 60.75 dB @ 77 'F (25 'C) 42.5 dB from 0 to 122 'F (18 to 50 'C) Resolution 0.1 dB Spectrum Measurement Forward Path: 510 100 MHz Froquency Range Return Path: 4 to 110 MHz Forward Path: 10.30, 100, and 300 kHz 1 and 3 MHz Bisplay Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: UB-seedeable in 1 kHz steps Display Spans Return Path: 4 to 42 MHz (4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: UB-seedeable in 1 kHz steps Display Range 8 vertical divisions (when marker bar is hidden) Spectrum Measurement 60 dB @ 25' C (77' F) (+50 dBmV) Bisplay Scale 1, 2, 5, or 10 dB/dWision Display Range 8 vertical divisions (when marker bar is hidden) Spectrum Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -40 dBmV (50 MHz to 1 GHz)		US Models: 6 MHz
Amplitude Range -40 dBmV to +50 dBmV Modulation Types Analog: NTSC, PAL BLD/G/H//K/N & SECAM BLD/G/H///K Digita: 16/32/B4/128/256 QAM Annex A, 64/256 QAM Annex B Analog Measurement ±0.75 dB @.77 °F (25 °C) ±2.0 dB from 0 to 122 °F (-18 to 50 °C) Digital Measurement ±0.75 dB @.77 °F (25 °C) ±2.5 dB from 0 to 122 °F (-18 to 50 °C) Resolution 0.1 dB Spectrum Measurement Forequency Range Resolution Bandwidth Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 4 to 120 °F (-18 to 50 °C) Display Spans Return Path: 4 to 140 MHz Forward Path: 5 to 1000 MHz Spectrum Measurement Hour Path: 4 to 140 MHz Forward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 300 kHz Forward Path: User-selectable in 1 kHz steps Display Scale 1.2, 5, or 10 dB/division 0 dB @ 25 °C (77 °F) (+50 dBmV) @ dB @ 25 °C (77 °F) (+50 dBmV) Sensitivity Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -40 dBmV (50 MHz to 110 MHz) Display Channel Measurement Ves Display Asange 0 dB @ 25 °C (77 °F) (+50 dBmV) Bender Ture BER, derived from code words not from MER Spentives Free Dynamic 40 12 dB @ +6 dBmV RF Input Level Objtala Channel Measurement Ves <tr< th=""><th>Channel Bandwidth</th><th></th></tr<>	Channel Bandwidth	
Modulation Types Analog: NTSC: PAL B/D/G/H/IK/N & SECAM B/D/G/H/IK/K Digital: 16/32/64/126/256 QAM Annex A, 64/256 QAM Annex B Analog Measurement Accuracy ±0.75 dB @ 77 °F (25 °C) ±2.0 dB from 0 to 122 °F (+18 to 50 °C) Digital Measurement Accuracy ±0.75 dB @ 77 °F (25 °C) ±2.5 dB from 0 to 122 °F (+18 to 50 °C) Resolution 0.1 dB Spectrum Measurement Forward Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Display Spans Return Path: 4 to 42 MHz 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz 4 to 65 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division 0 bisplay Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Bage Interfeave Compatibility Go dB @ 25 °C (77 °F) (+50 dBmV) Display Laber MER 40 ± 2 dB @ +6 dBmV (50 MHz to 110 MHz) Forward Path: 40 dBmV (50 MHz to 110 GHz) Display Cale 1, 2, 5, or 10 dB/division Bage Interfeave Compatibility Yes Desp Interfeave Compatibility Yes Downstream MER 40 ± 2 dB @ +6 dBmV RF Input Level 34 ± 2 dB @ -6 dBmV RF Input Level Standed: "TU JB 38 anex A, B, C Range: 1 E-7 to	Amplitude Pange	
Modulation Types Digital: 16/32/64/128/256 QAM Annex A, 64/256 QAM Annex B Analog Measurement Accuracy 40.75 dB @ 77 'F (25 °C) ±2.0 dB from 0 to 122 'F (-18 to 50 °C) Accuracy 40.75 dB @ 77 'F (25 °C) ±2.5 dB from 0 to 122 'F (-18 to 50 °C) Accuracy 40.75 dB @ 77 'F (25 °C) ±2.5 dB from 0 to 122 'F (-18 to 50 °C) Resolution 0.1 dB Spectrum Measurement Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 4 to 410 MHz Forward Path: 10.00, and 300 kHz 1 and 3 MHz Resolution Bandwidth Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: 10.90, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Spans 8 vertical division Spurious Free Dynamic Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range 8 vertical divisions (when marker bar is hidden) Digital Channel Measurement Yes Downstream MER 40.42 dB @ + 6 dBmV (F Input Level 34.22 dB @ - 6 dBmV RF Input Level		
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Accuracy±2.0 dB from 0 to 122 °F (-18 to 50 °C)Digital Measurement Accuracy±0.75 dB @ 77 °F (25 °C) ±2.5 dB from 0 to 122 °F (-18 to 50 °C)Resolution0.1 dBSpectrum MeasurementEnvery Path: 4 to 110 MHz Forward Path: 5 to 1000 MHzFrequency RangeReturn Path: 4 to 110 MHz Forward Path: 5 to 1000 MHzResolution BandwidthReturn Path: 300 kHz 1 and 3 MHzDisplay SpansReturn Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz stepsDisplay Scale1.2.5, or 10 dB/divisionDisplay Range0 dB @ 25° C (77° F) (+50 dBmV)Displat Channel Measurement CompatibilityYesDisplat Channel Measurement Scand Path: :00 dBmV RF Input Level 3+24 dB @ -6 dBmV RF Input LevelDownstream MER0+22 dB @ +6 dBmV RF Input Level Standard: ITU J &B annex A, B, C Range: I E-7 to 1 E-9 @ -6 dBmV RF Input Level		Digital: 16/32/64/128/256 QAM Annex A, 64/256 QAM Annex B
Pigtal Measurement ±0.75 dB @ 77 'F (25 °C) ±2.5 dB from 0 to 122 'F (-18 to 50 °C) Resolution 0.1 dB Spectrum Measurement Environment Frequency Range Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 300 kHz Forward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Sperious Free Dynamic Range 60 dB @ 25' C (77' F) (+50 dBmV) Sperious Free Dynamic Compatibility Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -30 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Yes Downstream MER 40 ± 2 dB @ + 6 dBmV RF Input Level 34 ± 2 dB @ - 6 dBmV RF Input Level 34 ± 2 dB @ - 6 dBmV RF Input Level 34 ± 2 dB @ - 6 dBmV RF Input Level	Analog Measurement	±0.75 dB @ 77 °F (25 °C)
Accuracy ±2.5 dB from 0 to 122 °F (-18 to 50 °C) Resolution 0.1 dB Spectrum Measurement Return Path: 4 to 110 MHz Frequency Range Return Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 5 to 1000 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Scale 1, 2, 5, or 10 dB/division JDisplay Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic 60 dB @ 25° C (77° F) (+50 dBmV) Bigliat Channel Measurement Forward Path: -30 dBmV (40 MHz to 110 MHz) Downstream MER 40 ±2 dB @ +6 dBmV RF Input Level At ±2 dB @ -6 dBmV RF Input Level 41 ±2 dB @ -6 dBmV RF Input Level Bownstream BER Wethod: True BER, derived from code words not from MER	Accuracy	±2.0 dB from 0 to 122 °F (-18 to 50 °C)
Accuracy ±2.5 dB from 0 to 122 °F (-18 to 50 °C) Resolution 0.1 dB Spectrum Measurement Return Path: 4 to 110 MHz Frequency Range Return Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 5 to 1000 MHz Poward Path: 5 to 1000 MHz Foward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Foward Path: 10 42 MHz, 4 to 85 MHz or 4 to 110 MHz Poward Path: User-selectable in 1 kHz steps Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division J Display Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic 60 dB @ 25° C (77° F) (+50 dBmV) Boge Interleave Yes Compatibility Yes Downstream MER 4±2 dB @ +6 dBmV RF Input Level 3t±2 dB @ -6 dBmV RF Input Level 3t±2 dB @ -6 dBmV RF Input Level Standard: 1TU JB3 annex A, B, C Range: 1E-7 to 1 E-9 @ -6 dBmV RF Input Level	Digital Measurement	±0.75 dB @ 77 °F (25 °C)
Spectrum Measurement Spectrum Measurement Frequency Range Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 300 kHz Forward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Spurious Free Dynamic Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -30 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Ves Deep Interleave Compatibility Yes Downstream MER 40 ± 2 dB @ + 6 dBmV RF Input Level 34 ± 2 dB @ - 6 dBmV RF Input Level Downstream BER Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Accuracy	
Frequency Range Return Path: 4 to 110 MHz Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 300 kHz Foward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Spurious Free Dynamic Range 8 vertical divisions (when marker bar is hidden) Sensitivity Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -40 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Compatibility Yes 40 ±2 dB @ +6 dBmV RF Input Level 34 ±2 dB @ -6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Resolution	0.1 dB
Frequency Range Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 300 kHz Foward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Display Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range 60 dB @ 25' C (77' F) (+50 dBmV) Beep Interleave Compatibility Yes Downstream MER 40 42 dB @ +6 dBmV RF Input Level 34 ± 2 dB @ - 6 dBmV RF Input Level 34 ± 2 dB @ - 6 dBmV RF Input Level Downstream BER Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Spectrum Measurement	
Forward Path: 5 to 1000 MHz Resolution Bandwidth Return Path: 300 kHz Foward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Bisplay Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range 60 dB @ 25' C (77' F) (+50 dBmV) Beep Interleave Compatibility Yes Downstream MER 40 ±2 dB @ +6 dBmV RF Input Level 34 ±2 dB @ -6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J 83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Frequency Pango	Return Path: 4 to 110 MHz
Resolution Bandwidth Foward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Display Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range 60 dB @ 25° C (77° F) (+50 dBmV) Sensitivity Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: 40 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Yes Deep Interleave Compatibility Yes Downstream MER 40 ± 2 dB @ +6 dBmV RF Input Level 34 ± 2 dB @ -6 dBmV RF Input Level 34 ± 2 dB @ -6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Trequency Range	Forward Path: 5 to 1000 MHz
Resolution Bandwidth Foward Path: 10, 30, 100, and 300 kHz 1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Display Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range 60 dB @ 25° C (77° F) (+50 dBmV) Sensitivity Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: 40 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Yes Deep Interleave Compatibility Yes Downstream MER 40 ± 2 dB @ +6 dBmV RF Input Level 34 ± 2 dB @ -6 dBmV RF Input Level 34 ± 2 dB @ -6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level		Return Path: 300 kHz
1 and 3 MHz Display Spans Return Path: 4 to 42 MHz, 4 to 65 MHz, 4 to 85 MHz or 4 to 110 MHz Forward Path: User-selectable in 1 kHz steps Display Scale 1, 2, 5, or 10 dB/division Display Range 8 vertical divisions (when marker bar is hidden) Spurious Free Dynamic Range 60 dB @ 25' C (77' F) (+50 dBmV) Sensitivity Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -40 dBmV (50 MHz to 16 Hz) Digital Channel Measurement Ves Deep Interleave Compatibility Yes Downstream MER 40 ± 2 dB @ +6 dBmV RF Input Level 34 ± 2 dB @ -6 dBmV RF Input Level Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Resolution Bandwidth	
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Spurious Free Dynamic Range 60 dB @ 25° C (77° F) (+50 dBmV) Sensitivity Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -40 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Yes Deep Interleave Compatibility Yes Downstream MER 40 ± 2 dB @ +6 dBmV RF Input Level 34 ± 2 dB @ +6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Display Scale	1, 2, 5, or 10 dB/division
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Range Return Path: -30 dBmV (4 MHz to 110 MHz) Forward Path: -40 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Yes Deep Interleave Compatibility Yes Downstream MER 40 ±2 dB @ +6 dBmV RF Input Level 34 ±2 dB @ -6 dBmV RF Input Level Downstream BER Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Spurious Free Dynamic	60 dB @ 25° C (77° E) (+50 dBm)/)
Sensitivity Forward Path:-40 dBmV (50 MHz to 1 GHz) Digital Channel Measurement Deep Interleave Compatibility Yes 100wnstream MER 40 ±2 dB @ +6 dBmV RF Input Level 34 ±2 dB @ -6 dBmV RF Input Level 200wnstream BER Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Range	
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Downstream MER 34 ±2 dB @ -6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Compatibility	res
34 ±2 dB @ -6 dBmV RF Input Level Method: True BER, derived from code words not from MER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level	Downstream MER	40 ±2 dB @ +6 dBmV RF Input Level
Downstream BER Standard: ITU J.83 annex A, B, C Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level		34 ±2 dB @ -6 dBmV RF Input Level
Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level		Method: True BER, derived from code words not from MER
	Downstream BER	
Symbol Rates $\geq 2 \text{ msps} \leq 6.952 \text{ msps}$		Range: 1 E-7 to 1 E-9 @ -6 dBmV RF Input Level
	Symbol Rates	≥ 2 msps; ≤ 6.952 msps



Cable Modem Measurement

Protocol Support	DOCSIS 1.1 / 2.0 / 3.0 compliant (US & Euro DOCSIS 8x4) SNMP V1, V2c, V3
	IEEE 802.3, 802.3u
	CE mark
Compliance Certificates	RoHS compliant
	CableLabs® wave 80 (DOCSIS 8x4)
	Demodulation: 64 QAM, 256 QAM
	Data rate:
	Up to 304 Mbps with 8 downstream channel bonding (DOCSIS 8x4)
Receiver Demodulation	Up to 400 Mbps with 8 downstream channel bonding (EuroDOCSIS 8x4)
Receiver Demodulation	Channel bandwidth:
	6 MHz (DOCSIS)
	6/8 MHz (Dual mode 8x4)
	Maximum modem input signal level: 17 dBmV
	Modulation: QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM, and 128 QAM (SCDMA only)
	Data rate: Up to 108 Mbps with 4 upstream channels bonding
	Frequency (edge to edge):
Transmitter Modulation	5 to 42 MHz (DOCSIS)
	5 to 65 MHz (EuroDOCSIS)
	Output level of CM can be controlled by CMTS though power ranging function
	Step: 1 dB
Carrier-to-Noise Measuremen	t (In-service, non-scrambled standard channels only)

Minimum Input Level for Full Range	+10 dBmV
Dynamic Range	50 dB
Resolution	< 0.5 dB
Tilt Measurement	
Max Number of Carriers	14 (dependent on favorite channel setup)
High/Low Delta Resolution	0.1 dB
Scan	Video, audio, pilot, and digital carriers



Analog & Digital HUM (In-service, non-scrambled standard channels only)

Minimum Input Level	0 dBmV
Range	0 to 5%
Resolution	0.1%
Accuracy	±0.5%
Frequency Domain Reflectometer	
Velocity of Propagation	Adjustable from 60.0 to 99.0% in 0.1% increments
Working Distance	Minimum: 755 feet (230 meters) @ VoP of 60.0% Maximum: 1247 feet (380 meters) @ VoP of 99.0%
Amplitude Range	0 to -80 dBRL
Distance Accuracy	5 feet

OPTIONAL MEASUREMENT SPECIFICATIONS

Source Generator

Modulation	CW, 16 QAM, 32 QAM, 64 QAM, 128 QAM, 256 QAM
Frequency Range	5 to 85 MHz
Amplitude	CW: Adjustable from 10 to 40 dBmV 16/32/64/128/256 QAM: Fixed 30 dBmV
QAM Symbol Rates	0.64, 1.28, 2.56, 5.12 MSPS
QAM Source Error Rates	BER: Adjustable from 0 to 1.00E-2 MER: > 38 dB
CW Source Accuracy	±2 dB



PHYSICAL & ENVIRONMENTAL SPECIFICATIONS

Physical Specifications

Construction	Rubber overmolded plastic housing
Control	Glow in the dark keypad and LCD touch screen and/or via a wireless connection to a mobile device such as a laptop, tablet, iPad® or iPhone®, or Android® handset
Display	Color LCD touch screen 480 x 272 pixels (approx 4" x 2.25")
Annunciators	Audible annunciator for key strokes
Antenna	Internal Wi-Fi antenna, 2 dB gain
Flashlight	High intensity LED (0.25W)
Dimensions w/o Case (H x W x D)	8.0 x 5.5 x 2.75 in (20.32 x 13.97 x 6.99 cm)
Dimensions w/ Case (H x W x D)	9.0 x 6.5 x 3.75 in (22.86 x 16.51 x 9.53 cm)
Weight w/o Case	2.75 lbs (1.25 Kg)
Weight w/ Case	3.75 lbs (1.70 Kg)

Available Interface Types

RF Test Port	Replaceable F-Type connector DOCSIS 3.0 Modem (8x4)	
Ethernet	RJ45 Management Port (10/100 Mbps) RJ45 Electrical Test Port (10/100/1000Base-T) SFP Optical Test Port (100/1000Base-X)	
Wi-Fi	802.11 b/g/n 2.4/5 GHz Wi-Fi Adapter	
USB	USB 2.0 Type-A Standard Port	
Bluetooth (Optional)	Class II Mini Bluetooth USB Adapter (v2.1) with a 10 meter range for speeds up to 3 Mbps	

Battery & Power Specifications

Operating Time	8 to 10 hours, dependent on use
Charge Time	4 hours
Battery	Two 2600 mAh @ 7.4V Li-Ion internal batteries, factory replaceable
Power Adapter	Input: 100 to 240 VAC ~ 47 to 63 Hz, 1.1A Max Output: 15 VDC, 3.3A

Environmental Specifications

Storage & Operating Temperature

-18° to +50° C (0° to 122° F)

INCLUDES THE FOLLOWING:

720 DSP Meter Protective Carrying Case Shoulder Strap AC to DC Power Adapter & Battery Charger US AC Power Cable (US Models) Euro AC Power Cable (Euro Models) Touchscreen Stylus

SOFTWARE:

ViewPoint Express Configuration Software for the 720 DSP P/N 0930215000

ViewPoint Integrated Server with WFM Module for the 720 DSP P/N 2011656002

ACTS[™] Software **P/N 0930144000**

RELATED PRODUCTS:

Precision Test Cable (I/O-15) P/N 2071527048

I-Stop 1 GHz Test Probe P/N 2010838002

TLB-46 Return Measurement Low-Pass Filter P/N 2011640000