

DS2460T ISDB-T_B Analysis Meter

Key Benefits

- 5MHz ~ 1220MHz simple and fast spectrum analysis
- 5 ~ 1052MHz (Analog TV), 44MHz ~ 1052MHz (ISDB-T_B)
- ISDB-TB measurement: Average Power, MER, CBER, VBER, and Constellation
- Analog TV measurement: Level, V/A, HUM and C/N
- Automatic channel plan generation; supports up to 20 custom channel plans
- Achieve faster testing and ease data interpretation with Pass/Fail auto testing
- "Toolbox" management software enables user to quickly configure the unit
- Use USB Micro B 2.0 port for PC communication
- Ethernet port supports Ping function

Overview

The DS2460T-ISDB is a multifunction instrument, which supports analog signals. Its ruggedized design, which includes a chassis protector, combined with icon display GUI and programmable preset pass/fail limits, provides increased efficiency and productivity for all levels of technicians.

Other features, such as return path & forward spectrum scan, 12 favorite tilt frequencies, AC line voltage test, HUM and DC voltage measurements, combined with complete data logging and management software, make this unit a versatile tool for cable installations.



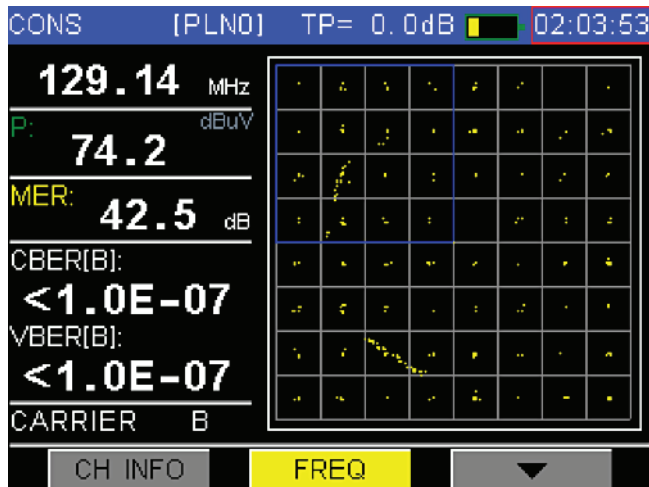


Figure-1 MER, CBER, VBER & Constellation

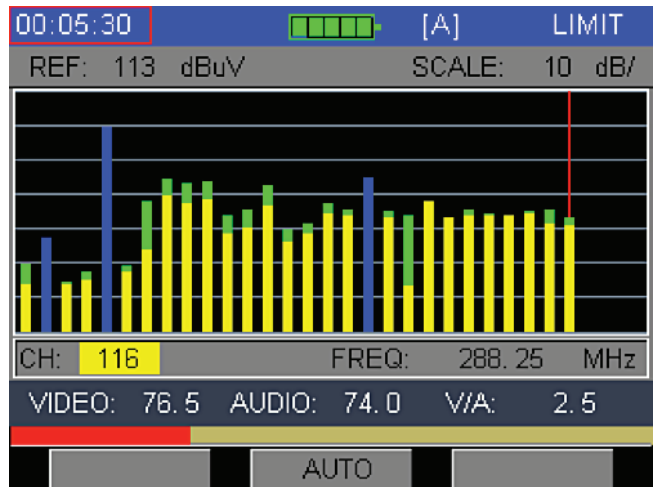


Figure-4 Channel Scan

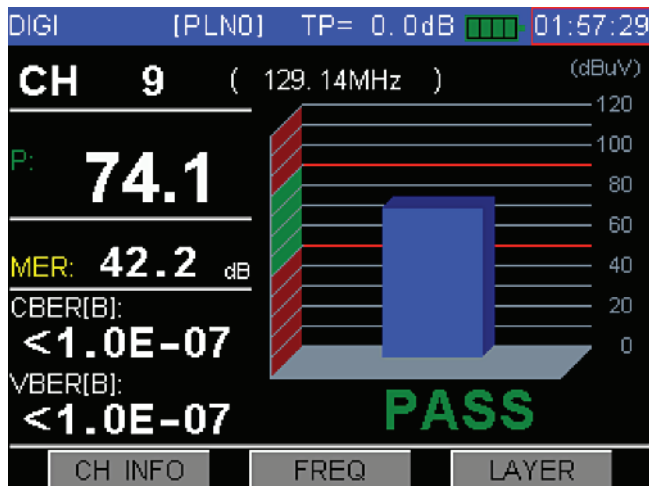


Figure-2 Power Level Measurement

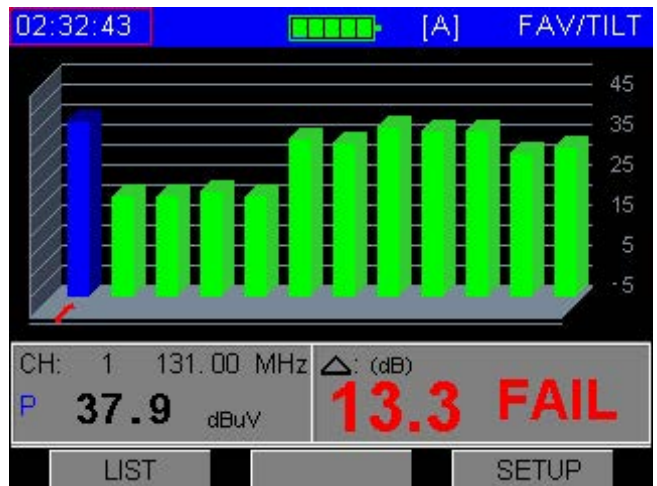


Figure-5 Tilt (Max 12 Channels)

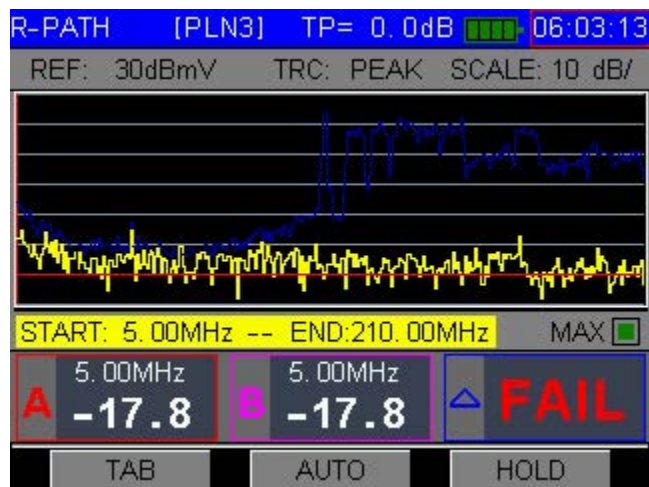


Figure-3 Return Path Spectrum (5~210MHz)

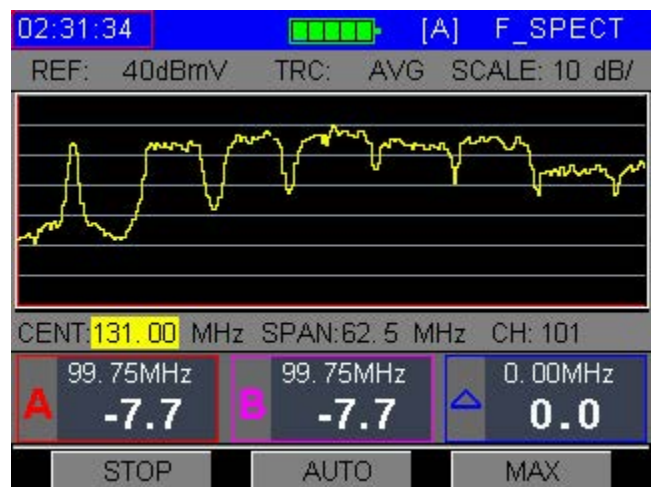


Figure-6 Forward Spectrum

Up to 20 Stored Channel Plans

Several technicians or contractors work with more than one HFC network and it is very practical to have different channel plans to choose from. The DS2460T-ISDB allows to program and select from up to twenty (20) different channel plans. Analog and/or digital channels and custom frequencies can be configured by using the automated channel plan learning tool from an RF drop, or by downloading from the PC using the Toolbox software. The user can select up to 12 channels in each of the 20 user defined plans and assign them to a favorite/tilt channel plan.

Spectrum Analysis and Measurements

The DS2460T-ISDB offers three spectrum analysis modes: normal, fast, and return path. Fast spectrum analysis allows technicians to view frequencies from 5~1220MHz. Normal spectrum analysis compensates lower speed with better amplitude accuracy. For troubleshooting cable TV reverse path issues, the unit can be set to display frequencies from 5~65MHz, providing additional options to the technician managing upstream data signals. All modes include helpful markers, and transient anomalies can be captured with the max hold feature.

Full Spectrum Scan (with Markers)

The DS2460T-ISDB can scan 160 channels, improving flatness and amplitude of the HFC network. With help from markers, the technician can quickly locate anomalies related to mismatches caused by poor grounding or damaged transmission lines.

HUM Measurement

Hum measurement helps the technician identify and troubleshoot anomalies which may result from defective capacitors, faulty line splitters, or couplers due to lightning or excessive current overloads. Both 60 & 120 Hz tests are performed @400Hz LPF measurements.

Auto Diagnostic User-defined Limit Test (Pass/Fail)

The auto test simplifies the test by displaying pass/fail results. The pass/fail limit can be set by the end user for Power levels, MER, CBER, VBER, Spectrum Analysis, Tilt, and HUM measurements. With its simple save function, the technician will no longer be required to manually take note of the results. As a result, more installations or service calls may be performed in a day. Additionally, every measurement is recorded; there is no room for error. This forces performance accountability for each location, reducing the need to return to previously tested locations, which may be costly to the organization.

File Management - Test Data Storage

Multiple test data files can be saved and stored as analog carriers or frequencies, QAM carriers or digital frequencies, channel scan, tilt, frequency spectrum measurement and/or HUM. The results are saved in the File Directory menu, with file name, time and date. These data records can be uploaded to a PC via the Toolbox software for reporting, data analysis, and printing.

Voltage Measurement

The unit can measure battery voltage, trunk & distribution line voltage of the cable system, identifying AC or DC automatically. With the intelligent power management system, the battery provides approximately 5 hours of continued operations when fully charged.

Specifications

Normal Spectrum Analysis	
Frequency Range	45 MHz ~ 1052 MHz
Span	2.5 MHz; 6.25 MHz; 12.5 MHz; 25 MHz; 62.5 MHz; Full Span
Fast Spectrum Analysis	
Frequency Range	5MHz ~ 1220MHz
Span	12.5MHz, 25MHz, 62.5MHz, Full Span
Channel Scan	
Number of Channels	160 channels max
Scale	1,2,5,10dB/div
Zoom	1X,2X,3X,4X,5X five levels
Analog TV Measurement	
Support Standard	PAL, NTSC and FM Radio (Single Frequency)
Level Measurement	Range: -30dBmV to +60dBmV; Accuracy: ±2dB; Resolution: 0.1dB
Frequency	Range: 5M-1052M ; Accuracy: ±50ppm; Resolution: 10KHz
Resolution Bandwidth	280KHz
C/N	>50dB
HUM Measurement Range	2% to 5%
ISDB-T _B Measurement	
Modulation Type	QPSK, 16 QAM, 64 QAM
Modulation Bandwidth	6MHz
Power Level Range	-35dBmV ~ 50dBmV
Power Resolution	0.1dB
Power Level Accuracy	±2.0dB (C/N>20dB)
MER Measurement	> 40dB
MER Accuracy	±2.0dB
CBER	1E-1 ~ 1E-5
VBER	1E-1~1E-7
Constellation	√
Line Voltage Measurement	
Range	0V to 100V (AC/DC) with accuracy ±2V
Others	
RF Input	75Ω
USB	USB Micro B 2.0
Ethernet	10/100M
Display	2.8" 320x240 TFT LCD
AC/DC Adapter	AC 100V to 240V 50-60Hz ,DC 15V/0.9A
Battery	7.4V 2.5Ah Lithium Battery
Charge Time/ Working Time	5 hours/>5hours
Dimension (W×H×L)	200mm × 106mm × 54mm
Weight	About 600 grams
Work / Storage Temperature	-10 ~ +40°C/-20 ~ +70°C

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