

DTV Analyzer DSA-100P

Portable Measurement Set For DTV & DMB
With General Purpose Spectrum Analyzer



Features and Benefits

- Support combined functionality of DTV, DMB and spectrum analyzer in a single instrument
- FPGA and chip-based real-time demodulators for ATSC/8VSB, T-DMB/DAB
- Light weight and compact portable measurement set with built in rechargeable battery
- Display the measuring result on high resolution LCD monitor(10.4")
- Easy and efficient measurement with multi-touch interface
- Provide specialized graphical user interface for DTV, DMB signal analysis
- Include simple and powerful reporting function
- Robust and compact design for both of portable and stationary use
- Excellent cost performance with multiple functionality

Interface

- RF Input (N Type)
- 10.4"LCD (1024 x 768)
- Projected Capacitive Touch Interface
- Function & Menu Hard-Key
- Scroll Knob
- USB 2.0 x 2
- Gigabit Ethernet Port (RJ-45)
- 3 Status LED
- 8GB Internal Data Storage (SSD)

Measurement

In Band

- Frequency Response and Group Delay Error
- Amplitude and Phase Error
- Peak to Average Power
- Signal to Noise / MER
- Phase Noise (ATSC)
- Channel Impulse Response

Out Band

- Out of Channel Emissions (3Ch./5Ch.)
- 2nd / 3rd Harmonic
- Spectrum Analyzer

Specifications

DTV & DMB Part

- RF Input Frequency Range: UHF/VHF (DTV/DMB)
- Input Impedance: 50ohm
- Frequency Response Error: $\leq \pm 0.2\text{dB}$
- Group Delay Error: $\leq \pm 4\text{ns}$
- Amplitude Error: $\leq \pm 0.1\text{dB}$
- Phase Error: $\leq \pm 2\text{degrees}$
- Peak to Noise Ratio Error: $\leq \pm 0.5\text{dB}$
- Out of Channel Spectrum: $\leq 80\text{dBc}$ (DTV) / $\leq 70\text{dBc}$ (DMB)
- 2nd / 3rd Harmonic: $\leq 80\text{dBc}$ (DTV) / $\leq 70\text{dBc}$ (DMB)
- Signal to Noise: $\geq 45\text{dB}$, MER $\geq 45\text{dB}$
- Phase Noise: $-115\text{dBc/Hz}@20\text{KHz}$ (DTV)
- Channel Impulse Response: $\leq \pm 2\mu\text{s}$ (DTV) / $\leq \pm 15\mu\text{s}$ (DMB)

Spectrum Part

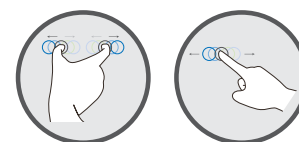
- Input Frequency: 300kHz ~ 3GHz
- DANL: $\leq -140\text{dBm}(1\text{Hz})$
- Frequency Tolerance: $< 2.0\text{dB p-p}$
- Max Input Power: $+20\text{dBm}$
- Input Attenuation: 60dB
- Phase Noise: $< -90\text{dBc/Hz}@10\text{KHz}$

General

- Dimensions: 328(W) x 217(H) x 99(D), mm
- Weight: 4Kg
- Li-Po Battery
- 19V DC Adaptor (110V ~ 220V)
- Carrying Bag

Environmental

- Operating temperature: $0^{\circ}\text{C} \sim +45^{\circ}\text{C}$
- Storage temperature: $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$
- Permissible related humidity: 85%



Multi-Touch Interface

