

ATSC-M/H Multiplex Signal Generator

ATX2000



The ATX2000 ATSC-M/H Multiplex Signal Generator is specifically designed and developed for the ATSC-M/H standard which is a new mobile broadcasting standard in the United States. The ATX2000 provides a variable broadcasting simulation test environment and can be tailored to specific situations using a comprehensive set of parameters and multiplexing function controls. It is the most advanced ATSC-M/H solution available today.

This all-in-one ATSC-M/H Multiplex Signal Generator offers a patented, easy-to-use interface, and high-quality RF and ASI outputs in a stable, portable platform. The ATX2000 will enable engineers to reduce time and development cost as well as enable them to bring products to market quicker to meet the needs of the emerging mobile broadcasting market.

KEY FEATURES

- Modulation: ATSC-M/H (8-VSB)
- Real-time Multiplex function for Main Stream, Mobile A/V, Data, and ESG
- Supports all Modes in the ATSC-M/H standard
- Information editing function of TPC, FIC, Signaling Sections (SMT, GAT, SLT, CIT)
- Multiplexed TS Capture & Save function
- Plays captured ATSC-M/H TS
- Live ATSC-M/H TS Playing from External ATSC-M/H MUX
- ASI Output support for testing an External ATSC-M/H Exciter
- Multiplexer-centered, Easy-to-Use Interface
- Multiplex Status Monitoring
- Analog IQ Output support for AWGN & Fading Test
- Live Input support
 - Main Stream (ASI)
 - Mobile A/V, DATA, ESG (Ethernet)

APPLICATIONS

- ATSC-M/H Broadcast Engineering Simulation
- Research and Development of ATSC-M/H Receivers
- ATSC-M/H Product Manufacturing & Signal Centers
- Precise Demonstration of ATSC-M/H Chipsets and High Performance Receivers
- ATSC-M/H Chipset H/W & S/W Development
- ATSC-M/H Middleware Development

SPECIFICATIONS

ATX2000 ATSC-M/H Multiplex Signal Generator

GENERAL

RF Upconverter:	50 to 870 MHz (Adjustable)
Power Level:	-110 to 0 dBm (Adjustable)
Power Supply:	100 to 250 VAC, 50/60 Hz
Power Consumption:	Less than 300W
Storage Capacity:	160 GB or over
Operating Temperature:	10° to 40° C
Operating Humidity:	20 to 85% RH (No Condensation)
Storage Temperature:	-40° to +70° C / 20 to 85% RH
Operating Environment:	Indoor
Over-voltage Category:	II
Pollution Degree:	2
Dimensions:	330.5 (W) x 209 (H) x 377.5 (D) mm
Weight:	Approx. 13Kg (Without Options)

RF SPECIFICATIONS

Output Connector:	N Type
RF Output Frequency:	50 to 870 MHz (VHF/UHF)
RF Frequency Resolution:	1 Hz
Frequency Accuracy:	3 x 10 ⁻⁶ / 25° C
RF Power Level:	-110 to 0 dBm
RF Level Resolution:	0.1dB steps
RF Level Accuracy:	±0.5 dB relative to the level at 18-33°C
RF Impedance:	50 Ω

MODULAR SPECIFICATIONS

Broadcasting system	
Digital Terrestrial TV:	ATSC-M/H
Transmission Parameter	
Modulation:	8-VSB
RS Coding:	RS (207,187) (Systematic/ Non-Systematic)

INTERFACE SPECIFICATIONS

ASI In/Out	
Null Packet Insertion from H/W	
Input bitrate:	0 to 214 Mbps
Packet Size:	188/204 Byte
Analog I/Q Out	
Internal Base-band I/Q	
Output Connector Type:	BNC
Output Impedance:	50 Ohm
Output Voltage:	Max 300 mV
LAN	
Ethernet 10/100 Local Area Network	

OS SYSTEM

Embedded OS

USER INTERFACE SYSTEM

8.4 inch TFT color LCD (800 x 600)
Touch Screen
Control Panel – Button, Jog Shuttle

EXTERNAL INTERFACE SYSTEM

USB Interface: USB HDD, USB Stick