

T-DMB/DAB Multi Signal Generator – TMG3000



● Features

system

- All-in-One T-DMB Generator
 - DMB Service + DAB Service + Ensemble Mux. + OFDM Modulator + Up-converter
- User Friendly UI based on Windows
- Size of Storage for Video, Audio and Data (Basic 160GB~1TB)
- Extend a channel up to 3 per an unit
- Auto Test (Optional)
- GPIB Remote Control/RS232 (Optional)

RF

- Output : Band III, L-band, IF, IQ
 - Band III : 174Mhz~250Mhz
 - L-band : 1452Mhz ~ 1492Mhz
- Support Transmission Mode I, II, III, IV
- Output Level : -120~0dBm
- Resolution : 0.5dBm
- Support C/N Generation
 - C/N Range : 0~+40dB (Resolution : 0.5dB)
 - Noise BW : ① 0~10MHz according from Signal CH BW (Spec.)
 - ② User Select : ~ Max. 45MHz
- Support Fading Simulation (Future Support)
 - 6 CHs (Optional : Max. 12CHs)
 - Speed Range : 0~120km/h
 - Path Delay : 100ns~10µs (Resolution : 100ns)
 - Path Loss : 0~-25dB (Resolution : 0.5dB)

Service

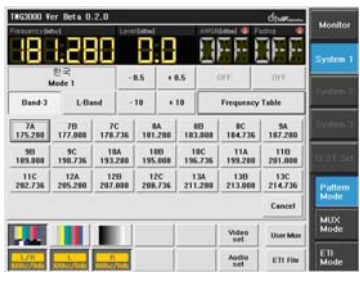
- Video Service
- Korea : H.264 + BSAC or H.264 + BSAC + BIFS
 - China : H.264/BSAC or H.264/AAC+
 - Other : H.264/BSAC or H.264/AAC+
- Video Bit rate : 8-1824(kbps)
- Audio Service : Musicam
- Audio Bit rate
- 32/48/56/64/80/96/112/128/160/192/224/256/320 (kbps)
- UEP/EEP Full Support
- UEP : Audio Protection Level 1, 2, 3, 4, 5
 - EEP : Video / Data Protection Level
 - 1-A, 2-A, 3-A, 4-A, 1-B, 2-B, 3-B, 4-B
- Data Service : BWS/SLS/DLS
- CAS (Optional)

Multiplexing

- Enhanced Packet Mode
 - Data Service FEC
 - EN 300 401 V.1.4.1 (2006-01)
- RS/CI Encoder integrated
 - Support RS/CI 204 byte Video TS
 - Support 188 byte Video TS
- ETI File Generation
- User Multiplexing
 - No limit for Number of Service and Service Component
- Support National FIG Information (Korea, China, Germany)
- Pattern Multiplexing
 - No limit for Number of Service and Service Component
 - One Touch Fast & Easy Mux. Interface



Monitoring View



System View



System Setting View

● H/W Specification

1. Frequency
 - Range: Band III, L
 - Resolution: 1Hz
 - Stability: 1ppm
2. RF Output Level
 - Range: 0~120dBm
 - Resolution: 0.5dB
 - Accuracy: ±1dB
 - Impedance: 50ohm
3. VSWR (Voltage Standing Wave Ratio) : Better than 1:1.5
4. Modulation
 - High performance OFDM modulation (Good SNR, Low Phase Noise architecture)
 - D-QPSK (Different Quadrature Phase Shift Keying)
5. Transmission Mode: Mode 1,2,3,4
6. IF Output: 36MHz~44MHz

Operating specification	
Voltage :	AC 100 ~ 240V, 50/60Hz
Operating temperature :	10 to 40 degree
Operating humidity :	45 ~ 85% RH
Guaranteed temperature:	15 to 35 degree
Guaranteed humidity :	45 ~ 85% RH
Dimensions :	377(W) x 360(D) x 162(H)mm
Weight :	About 9kg

Ordering Information

Base Model	Description
TMG3000	T-DMB/DAB Signal Generator * RF Level : 0dBm ~ -120dBm * RF Resolution : 0.5dBm * Frequency Range: Band II , III , L Band * Frequency Resolution: 1KHz

Options		Description	Notes
Option T	T-201	T-DMB/DAB Modulator & Up-converter Module * Selectivity Test & Multi Modulator & Multi RF	* User can select Max. 2 units of T-201 options (3 Modulator 3 RF)
	T-203	T-DMB/DAB Auto test Module * Sensitivity, Max Power, Selectivity, Black Out, BER Test	
Option ST	ST-201	DVB-H Module	* If user select T-201, this option can't be supported
Option B	B-101	ASI Out Module	* User can select B-101 and B-102 after selecting Option ST. * B-100 options after purchasing, it'll cost additional charges and delivery terms will be within 4 weeks.
	B-102	SPI Out Module	
	B-201	AWGN Module (0~+40dB)	
	B-202	Fading Module (Future Support)	
	B-100	Option Upgrade Service	




Base Model	Description
TMG3000M	T-DMB/DAB Signal Generator * RF Level : 0dBm ~ -120dBm * RF Resolution : 0.5dBm * Frequency Range: Band II , III , L Band * Frequency Resolution: 1KHz * Double RF output from 1 Modulator

Options		Description	Notes
Option T	T-202	T-DMB/DAB Modulator & Up-converter Module * Selectivity Test & Multi Modulator & Multi RF	* User can select Max. 2 units of T-202 option. (1 Modulator 6 RF)
	T-203	T-DMB/DAB Auto test Module * Sensitivity, Max Power, Selectivity, Black Out, BER Test	
Option B	B-100	Option Upgrade Service	* B-100 options after purchasing, it'll cost additional charges and delivery terms will be within 4 weeks.



Frame Specification

Frames (User Select)		
Type	Specification	Model
Standard Frame 1	<ul style="list-style-type: none"> • Display : 10.4" LCD with touch screen (1024X768) • HDD : 160G or higher • OS: Windows XP Professional • ODD: DVD Rom & CD RW Combo • Dimension : 450(W) X433(D)X230(H) mm • Ethernet, USB 2.0 * CE, FCC marked 	
Portable Frame	<ul style="list-style-type: none"> • Display : 12.1~15.1 inch TFT LCD Front Panel (800x600~1024x768) • HDD : 160GB ~ 400GB Max. • OS: MS Windows 2000 or XP • ODD: DVD-RW COMBO (DVD Recorder Optional) • Dimension : 400(W)X291(D)X213(H) mm / 15.7"X11.4"x8.3" • Ethernet, USB 2.0 * CE, FCC, UL, CCC marked 	
Super Portable Frame	<ul style="list-style-type: none"> • Display : 12.1inch X GA LCD (1024X768 : Standard) 14,1inch X GA LCD (1024X768 : Optional) • HDD : 80GB ~120GB • ODD: DVD-RW COMBO (DVD Recorder Optional) • OS : Windows XP • 12-32VDC car adapter • Expansion unit W/2*PCI (3/4 size) • Dimension : 310(W)x255(D)x70(H) mm / 12.2"x10"x2.8" * CE, FCC, UL, CCC marked 	
Standard Frame 2	<ul style="list-style-type: none"> • Display : 6.4" TFT LCD Front Panel (640X480) with touch screen • HDD : 80GB • OS : Windows XP Pro • Ethernet, USB2.0 • Dimension : 377(W)x360(D)x162(H)mm 	
Handheld Frame	<ul style="list-style-type: none"> • Display : 10.4" TFT LCD Front Panel (1024X768) with Touch Screen • HDD : 40GB~100GB • OS : Windows XP Pro • Ethernet, USB2.0 • Dimension : 11.7'(W)x9.4'(D)x1.7'(H) 	
Ultra Frame	<ul style="list-style-type: none"> • Large LCD with Touch Screen • Pentium 4, 3.0G Embedded OS • Memory 1G / HDD200G • DVD Rom / CD RW Combo 	