



(4 Modules with 1U-high Rack & Power Supply)



(10 Modules with 2U-high Rack & Power Supply)



(12 Modules with 2U-high Rack & 12 Power Supply Adaptors)

## M-520 HD/SD MODULATOR

Optional COFDM / QAM / DTMB / ATSC 1080p

### OVERVIEW

- High Technology Integration of HD Encoder plus COFDM/QAM/DTMB/ATSC Modulator
- Support 1080p Full HD, and HD/SD ready for digital TV sets and CCTV security.
- Ready to consolidate or combine existing or new RF coaxial cabling.
- Compatible with any terrestrial/cable tuner ready digital TV set/box.

### FEATURES

- Support H.264 and main video resolutions 1080 i/p, 720p, 576 i/p, 480i/p.
- HDMI input available for HD and SD encoding.
- Front plate LCD to read channel status.
- PMT, Video/Audio PID, Service/Network Name programmable.
- Friendly configuration & management control through front panel or software
- NIT/LCN setting thru front panel, or thru the web for large quantity/group
- Configuration & setting data available to copy to another unit.

## SPECIFICATIONS

### Video Input

HDMI : Single-link HDMI 1.4, Compliant with HDMI 1.3, HDCP 1.4 and DVI 1.0, Integrated pre-programmed HDCP keys (optional)

### Video Encoder

Video Encoding : H. 264 / AVC, Support Baseline profile, from level 1.0~ 4.0 up to 1080p@30fps, 1920x1080 full HD resolution

Video Encoding Data Rates : Variable

Color Profile : 4:2:0

### Modulation

Modulation Type (optional) : DVB-T COFDM /DTMB/ATSC or DVB-C QAM Annex A/B

Constellation : 64QAM for DVB-T COFDM/DTMB; 8VSB for ATSC  
64QAM/256QAM for DVB-C/Cable QAM

FEC Code Rate : 1/2, 2/3, 3/4, 5/6, 7/8

Guard Interval : 1/4, 1/8, 1/16, 1/32

Bandwidth : 6/7/8 MHz

FFT Mode : 2K, 8K

Carrier mode : Single, Multiple

Frame mode (for DTMB) : 420/945(Multiple); 595(Single)

Interleaving (for DTMB) : 240/720

### RF Output

Output Power : +95 dBuV with 20dB adjustment

Cable Standard : PAL-B/G/D/K/I, NTSC

Frequency Range : 470 - 860 MHz

Frequency Stability :  $\pm$  5KHZ

MER : 35 dB typical

Spurious : 55 dB typical

Symbol Rate : 4.1 ~ 7.0Mpsps

Phase Noise : 1k  $\geq$  70 dBc/Hz; 10k  $\geq$  80 dBc/Hz; 100k  $\geq$  90 dBc/Hz

Connector : F type female, 75 Ohms

### Control/Setup

Network interface : 10M Ethernet via RJ45 connection

**General**

**Power Supply**

AC Power Input : 90-250 VAC, 50/60 Hz. (for all 1U, 2U and adaptor types)  
 DC Power Output : **2U type:**12V/4A , 5V/6.4A ; **1U type:** 12V/2.6A , 5V/3.5A  
**Adaptor type** for single module: 12V/0.5A , 5V/0.5A  
 DC Power Input (Single Module) : 12V/470mA, 5V/130mA

Operating Temperature : 0°C to + 50 °C  
 Size (each module) : 1"W \* 3.5"H \* 7.5"D (2.5W \* 8.9 H \* 19.1D cm)  
 Weight (each module) : 0.3 Kg

**Packing per set :**

- \***One complete set for 20 modules** installed with 5 x 1U power supply & rack:  
 One packing carton for 20 modules: 16 Kgs/ 3.2 Cuft
- \***One complete set for 10 modules** installed with 2U power supply & rack:  
 One carton for one complete set;  
 One carton: 8 Kgs / 1.2 Cuft
- \***One complete set for 12 modules** installed with 12 power supply adaptors & rack:  
 One carton for one complete set;  
 One carton: 8 Kgs / 1.2 Cuft

**Rear Panel**



**\*Front Plate & Rear Panel of the Module**

