

## CREDIX MPD-1850



CREDIX MPD-1850, a Multi-tasking Broadcasting signal generator for DVB-T/H, DVB-C, DTMB (DMB-TH/ADTB-T), ATSC, Open, Cable, ISDB-T, SBTVD T-DMB, CMMB and IPTV

### > INTRODUCTION

CREDIX MPD-1850 is a Multi-tasking Broadcasting signal generator. It supports all Digital & Mobile TV Standard such as DVB-T/H, DVB-C, DTMB(DMB-TH/ADTB-T), ATSC, Open, Cable, ISDB-T, SBTVD T-DMB, CMMB and IPTV.

Nowadays, many of customers want to keep more than 2 different standards into their generator. For this needs, MPD-1850 platform functionality enables you to integrate whatever you need to test and update from all standards.

MPD-1850 has high-stability RF up-converter and modulator, transport stream generator with analyzing function as well in one system. It is highly optimized and cost-effective solution for Digital & Mobile TV related media products manufactures.

### > FEATURES

All DTV & Mobile TV Standards supports

High-stable & Precise RF output

Excellent modulation parameter setting

Comfortable GUI

Inter TS Generation & BER test pattern

External TS re-playing

Soft Key Touch

Touch Screen 1024 X 768 pixels  
2CH Multi TS playing (Optional)  
Analogue I/Q Interface (Optional)  
C/N Generation (Optional)  
Fading Simulation (Optional)  
Live Signal Capture, External Device (Optional)

> SPECIFICATIONS

**RF SPECIFICATION**

- RF Output Connector : N Type
- RF Output Frequency : 50MHz ~ 2.2GHz
- IMD : < -53dB@4.2MHz
- RF Frequency Resolution : 1Hz
- RF Power Level Resolution : 0.1 dB steps
- RF Level Accuracy : ±0.5dB relative to the level 8-33°C
- RF Impedance : 50Ω
- LO phase noise : @1KHz : better than -85dBc/Hz  
: @10KHz : better than -95dBc/Hz  
: @100KHz : better than -110dBc/Hz

**OPERATING SPECIFICATION**

- Power Supply : 100 ~ 240V/50~60Hz
- Operating temperature : 10°C ~ 40°C
- Operating humidity : 20 ~85% RH (No Condensation)
- Guaranteed temperature : 15°C ~ 35°C
- Guaranteed humidity : 20 ~ 85% RH (No Condensation)
- Storage temperature : -20°C ~ 60°C
- Operating environment : Indoor

## OS SYSTEM SPECIFICATION

- System : Window XP
- CPU : P4 2.0 GHz
- RAM : 2GHz
- Hard Disk : SATA capacity > 250GB
- Display : 10.4" TFT LCD 1024X768 pixels
- Dimensions : 430(W) X 220(H) X 474(D)
- Weight : Approx.17Kg

## INTERFACE SPECIFICATION

- USB Interface : 4 USB 2.0, USB HDD/USB
- Remote Control : RS-232C

GPIB(Optional)

TCP/IP(Optional)

### Detail specification:

#### ISDB-T(SBTVD)

Modulation BST-OFDM

Mode DQPSK, QPSK, 16QAM, 64QAM

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

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

Time Interleave Length 0 ~ 32

Mode Mode1, Mode2, Mode3

Real Time TMCC Multiplexing

Real Time Encoder(Optional)

Analog signal NTSC/PAL

Video Source Composite/ S-Video

A/V Encoder H.264/MPEG-4AVC, HE-AAC

Total Bitrate From 140 Kdps

Video Size 320X240

FPS 15 frame

## **DTMB(DMB-T/H)**

Modulation

Mode 4QAM(QPSK),4QAM-NR, 16QAM, 32QAM, 64QAM

FEC code rates 0.4, 0.6, 0.8

Frame Header Mode PN420, PN595, PN945

Interleave Mode 240, 720

Bandwidth 5,6,7,8MHz

## **DTMB(ADTB-T)**

Broadcasting ADTB-T

Mode 4QAM(QPSK), 4QAM-NR, 16QAM, 32QAM, 64QAM

FEC code rate 0.4, 0.6, 0.8

Frame Header Mode PN420, PN595,PN945

Interleave 240, 720

Pilots No pilots, Add pilots

## **CMMB**

Modulation CMMB (GY/T220.1-2006)

Byte Interweave mode mode1, mode2, mode3

RS coding (240,240), (240,224), (240,192), (240,176)

LDPC Bitrate

Guard Interval

Constellation

MAX Time Slot

MAX Remux Frame

Transmitter ID

Support both LCP and SCP mode

## **TDMB/ DAB/ DAB+**

Frequency Band III 174~250MHz

Frequency L-Band 1.452~ 1.492 MHz

Audio / Video H.264, BSAC, HE-AAC

Data Broadcasting BWS,SLS,DLS,BIFE,TPEG

Transmission mode I,II,III,IV

Test Patterns DAB, DAB+, T-DMB

Ensemble Multiplexing Service &Service component

Reconfiguration

### ETI Stream Generation

BER Test Pattern Generation

Real-Time Encoder(Optional)

- Accuracy  $\pm 10\%$  of maximum frequency deviation
- Analog signal NTSC/ PAL
- Video Source Composite/ S-Video
- RS/ CI Encoder WAVE, MPEG2
- AV Encoder H.264, BSAC, HE-AAC
- Video 8 ~ 1.824 Kdps
- Audio 32 ~ 384 Kdps

ETI Input & Output Interface

### DVB-T/H

Modulation COFDM

Mode QPSK, 16QAM, 64QAM

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

Code rates 1/2, 2/3, 3/4, 5/6, 7/8

FFT size 2K, 4K, 8K

Bandwidth 5,6,7,8 MHz

Cell identifier 0~65,535(decimal)

Time Slicing MPE-FEC used setting

### ATSC

Modulation 8VSB

Data rate 19.392Mbit/s

Bandwidth 6MHz

### DVB-C & Open Cable

Modulation QAM(Annex-A/C), QAM(Annex-B)

Mode 4, 16, 32, 64, 128, 256 QAM

Symbol rate 5 ~ 7.1Ms/s