

## Product Features

- *Optimized GB20600-2006 compliant single chip demodulator*
- *Supports both Multi-carrier and Single-carrier modes*
- *Supports 64QAM, 32QAM, 16QAM, 4QAM and 4QAM-NR modulation for both fixed and mobile applications.*
- *FEC rates of 0.4, 0.6 and 0.8*
- *Guard intervals of PN420, PN595 and PN945*
- *Time de-interleaving: M = 240 or M = 720*
- *MPEG-2 Transport Stream parallel output*
- *Automatic parameter discovery and update*
- *Integrated BER (bit error rate) monitoring*
- *Average Noise Magnitude monitoring*
- *Channel Bandwidth: 8 MHz*
- *Optimized for maximum signal resiliency in all conditions (impulse noise, echoes, fading, etc)*



## Description and Application

The DMR 8000 is a DTMB receiver and demodulator, fully compliant with the GB20600-2006 standard. The receiver is based on a specialized ASIC single chip demodulator. The demodulator supports both Multi-carrier and Single-carrier modes.

Designed for digital terrestrial reception of high definition, standard definition and other multi-media-based services, the demodulator is intended for indoor, outdoor, fixed, portable and automotive applications.

The DTMB receiver input signal is connected to a UHF tuner, which converts it to IF.

The ASIC demodulator chip receives the analog or digital IF input signal and converts it to baseband. It then performs the necessary demodulation and FEC (forward error correction) decoding and provides a parallel MPEG-2 transport stream output.

The operation parameters of the DTMB receiver are monitored and controlled by the embedded system controller.

The receiver control interfaces are the front panel display, the local RS232 serial port (supporting CLI – control line interface) and the 10/100 Base-T Ethernet port (protocols supported: WEB, Telnet and SNMP).

The DTMB receiver system is enclosed in a standard 1RU, 19" rack mount chassis. The receiver is cooled with forced air, using compact high performance fans installed on the receiver enclosure side panels.

## DTMB Professional Receiver

Model: DMR 8000



Fig.1 - Rear Panel

### Product Specifications (specifications are subject to change without notice)

#### Signal Processing

<b>Modulation</b>	TDS-OFDM
<b>Supported Standards</b>	GB20600-2006
<b>Guard Intervals</b>	PN420, PN595, PN945
<b>FEC Rates</b>	0.4, 0.6, 0.8
<b>Constellations</b>	64-QAM, 32-QAM, 16-QAM, 4QAM, 4QAM-NR
<b>Time De-interleaving</b>	M = 240 or M = 720
<b>Bandwidth</b>	8 MHz

#### RF Input

<b>Connector</b>	RF DTV, F-type (female), 75 ohm
<b>Operating Frequency Range</b>	UHF Band: 426 MHz - 862 MHz
<b>Level</b>	-87dBm to -20dBm
<b>Frequency Step</b>	1 MHz
<b>Return Loss</b>	≤ - 10 dB

#### Transport Stream Output

<b>Signal</b>	MPEG-2 Transport Stream - parallel
<b>Connector</b>	SPI: DB25 (F)

#### Control Interfaces

<b>WEB Interface</b>	Ethernet 10/100 Base-T
<b>SNMP Control Interface</b>	Connector: RJ45
<b>Telnet</b>	
<b>RS232 (Console)</b>	Connector DB9 (M) Protocol: CLI (Command Line Interface)
<b>RS485 Interface</b>	Connector DB9 (F) Reserved for factory use
<b>USB Interface</b>	Reserved for factory use

#### Power Supply

<b>Voltage</b>	100 - 120 VAC / 200 - 240 VAC
<b>Frequency</b>	50 - 60 Hz
<b>Power Consumption</b>	max. 40 VA

#### Mechanical

<b>Size</b>	1 U of 19" wide cabinet
<b>Dimensions (W x H x D)</b>	483mm x 44mm x 356mm 19.0" x 1.75" x 14.0"
<b>Weight</b>	6 kg (13 lbs.)

#### Environmental

<b>Operating Temperature</b>	0°C to +50°C (+32°F to +122°F)
<b>Storage Temperature</b>	-30°C to +70°C (-22°F to +158°F)
<b>Relative Humidity (operating/storage)</b>	max. 95%, non condensing
<b>Cooling</b>	Fan to assist natural convection