

IS8001- 60mW ISDB-Tb Exciter

**OFFERING MARKET LEADING SOLUTIONS.
ENABLING THE BROADCASTER TO DO MORE WITH LESS.**



The IS8001 is an exciter for ISDB-Tb Digital TV signals, native to the Brazilian norm and with excellent characteristics in UHF.

This exciter has been designed using state-of-the-art technology to fulfill not only a wide variety of broadcasters' requirements and needs, but also digital TV innovations.

A modern, frequency-agile up-converter with steps that exceed 1Hz precision and accuracy, is the basis that enables the transmitter's high performance, guaranteeing an extremely low local oscillator's phase noise and internal reference signals.

For better stability, time base can be external or internal. Sync is obtained with an internal GPS time base or an optional external GPS with rubidium.

Optional inputs include Transport Stream over Ethernet (UDP / RTP / Unicast / Multicast), terrestrial tuner (ISDB-Tb tuner), or satellite reception (DVB-S/S2 tuner).

A modern and effective linearization solution allows the equipment to surpass the necessary emission masks in an optimized manner.

An embedded measurement device performs 13 important ISDB-Tb measurements for signal quality monitoring of the transmitted signal with remote access.

All of the exciter's measurements and configurations are accessible through the frontal display and key pad.

The control software allows for complete telemetry of the equipment, remote control or alarms in case of malfunction, through a WebServer and SNMP protocol.

HIGHLIGHTS:

- ▲ Control Interface
- 2x40 text LCD display and keyboard
- Ethernet Web Server / SNMP
- ▲ Performance @ +18dBm
- Shoulder: ≥ 55 dB
- MER: ≥ 43 dB
- ▲ Indicators
- Power Supply Status
- Input Transport Stream Status
- Current / Past Alarms
- ▲ Self-cooling
- ▲ IF Complex Modulation
- ▲ Automatic "one-click" Linear and Non-Linear corrections
- One-shot algorithms
- ▲ Soft Start
- ▲ Time base for VCOXO with the possibility to sync it with GPS.
- ▲ Power Supply of high efficiency and low noise
- ▲ 4 interfaces of TS (2 DVB-ASI, 1 Tuner UHF or DVB S/S2 and 1 TS over ethernet) / BTS or IP
- ▲ Frontal Panel Adjustments
- LO Leakage Suppression
- Image Frequency Suppression
- ▲ PID filtering and remapping (Two profiles each of 32 PIDs);
- ▲ Inserting static tables locally (SI / PSI Editor);
- ▲ Editing channel virtual / physical
- ▲ Embedded non-linear pre-correction
- ▲ BTS decompressor
- ▲ Settings multiple selectable in accordance with input

INCLUDED:

- ▲ English manual

OPTIONS:

- ▲ SFN Operation;
- ▲ IP Input;
- ▲ Time base by internal GPS;
- ▲ Instrumental measurements of ISDB (MER, constellation, etc.) with remote access via port TS over IP (rear ethernet port).;
- ▲ Internal Loop for power control;
- Internal (-20 ~ +18dBm);
- ▲ Terrestrial reception of UHF;
- ▲ Satellite reception (DVB-S/S2).

TECHNICAL SPECIFICATIONS

INPUTS	
Transport Stream	DVB-ASI Fast Ethernet 100Mbps IP (IEEE 802.3u)
Transport Stream connector	BNC / 75 Ω or RJ45
Transport Stream data rate	270Mbps (ASI) / 100Mbps (ETH) or IP
External time base connector	BNC / 50 Ω
Feedback sample level	from 0dBm to +10dBm
Feedback sample connector	SMA / 50 Ω

TS OUTPUT	
Output	DVB-ASI
Connector / impedance	BNC / 75 Ω
Data rate	270Mbps (ASI)

OUTPUT	
Channels	UHF, channel 14 to 69.
Power	adjustable from -20dBm to +18dBm (calibrated)
Connector	N female
Modulation	OFDM
Channel Bandwidth	6MHz or 8MHz
Digital / Analog Converter	16 bit
Intermodulation	Better than -55dBc @ +18dBm / 3.15MHz

GENERAL	
Communication Interface	USB (correction algorithm) Ethernet (remote access) USB Host for firmware update
Frequency stability	± 50 ppb
Power supply (41 ~ 63Hz)	90 to 240Vac (automatic selection)
Temperature range	from -10°C to 40°C
AC consumption	approx. 70W (80W max.)
Humidity range	from 0 to 95%
Dimensions (mm)	44.45(H) x 482.6(W) x 525.7(D)
Net Weight (kg)	8.0 (approx.)

IS8001-V4-REV10-HEM-11/2013 - All specifications are subject to change without notice. The images contained on this datasheet are for illustrative purposes.