S7510



5W DVB-T/H & 20W Analogue IF INPUT TV Transmitter

Special Features

- High quality, compact design
- Dual Mode
- Broadband operation
- Fully Modular
- Choice of Output Filters
- LCD status display
- Ultra low phase noise
- Web based remote monitoring



Introduction

The S7510 is a high quality IF input TV transmitter which is normally used as part of the exciter system used in higher power systems. Its input would come from a separate, analogue or DVB-T, 1U high modulator. This arrangement provides a very simple conversion between the two formats. This unit, with a modulator, is equally suitable as a stand alone transmitter, a wide range of filters and combiners are available to meet all transmission requirements. Many of the modules are common to the remodulation/ transmitter derivatives reducing spares holding in a network operation.

System Overview

All the active parts of these transposers are contained within modules which plug into a motherboard inside a common system chassis. The high quality construction allows simple configuration and alignment changes and easy access for maintenance. Each sub-system function is contained within the appropriate module. The input is a standard IF frequency. The upconverter, with an associated low noise synthesiser, is programmable in 1Hz steps. The synthesisers can be externally locked making the systems ideal for the SFN and precision locked broadcast operation. Precorrection for the highly efficient class AB FET amplifier is provided at IF.

The power supply/display module provides all the DC voltages for the system as well as the control system and status indications/ measurements.

Specifications

Power Output Analogue: 20W p.s.

Digital: 5W rms

Output Power stability $\pm 0.5 dB$

Output Frequency stability <0.2ppm/year **Operating Frequencies/** Options for:

Input 38.9MHz, standard; others available

Output Options for:

VHF Band I: 45-90MHz; Band III 174-230MHz

UHF Bands IV & V: 470-860MHz

<-60dB at rated output power

RF Output Load Impedance 50 ohm unbalanced

Intermodulation distortion,

RF Output Connector N female

Spurious emission Receiver input -30 to -65dBm

MER Better than 36dB

Phase noise -70dBc@10Hz, -85dBc@100Hz-1kHz, -100dBc@10kHz **Protections** Overpower, Overvoltage, Over current, Over temperature

Power Requirements Single phase 230VAC ±20% or 48VDC **Ambient Temperature Range** -10°C to +45°C at an altitude up to 2500M **Remote Control** Aux port 25w; RS232, RS485, RJ45 Ethernet

Dimensions and Weight 3U 19" rack mounting: 482mm (W) x 450mm (D) x 132mm (H). 15kg