

TU38 DVB-T diversity tuner / demodulator

The TU38 is a two input diversity UHF tuner and DVB-T demodulator. It supports most commonly used DVB-T modes. It can also be used in a non-standard mode with channel widths down to 2MHz. This module is intended for use with the DS21 video decoder, and is not generally suitable for stand alone use. It can optionally supply power to external low noise amplifiers / downconverters.

Inputs

2x50 Ohm nominal, MMCX connector.

Frequency range

474MHz to 858MHz

DVB-T modes supported

All non hierarchical 2K and 8K modes.

5,6,7,8MHz bandwidth.

Optionally, non standard modes with 2,3 and 4MHz bandwidth.

Receiver sensitivity

-95dBm (8MHz DVB-T, QPSK rate 1/2)

Diversity Operation

Full post FFT sub-carrier by sub-carrier maximum ratio combining diversity.

Transport stream output

Standard 8 bit parallel transport stream at 3.3V

Power supply input

7-30V

Power supply output

5V regulated at up to 1.5A. This regulated output can be used to supply the DS21 decoder, and optionally external amplifiers / downconverters, via the UHF input connectors. This supply is protected against short circuit.

Power Consumption

6.5W, together with DS21.

Control/Status interfaces

I2C at 3.3V.

Interface connector to DS21

40 Pin Box header. This connector carries all transport stream, control/status and power connections needed to interface to the DS21.

Dimensions

Board size: 100 x 70mm
Height required above board, with connectors fitted:14mm

