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with compelling value

CT-DDC & CT-DUC Digital Off Air Downconverter & Upconverter

Digital Downconverter Features:

- Translates digital off air or CATV signals to a 44 MHz IF output
- Occupies one space in a 12 unit rack chassis
- Flat passband minimizes signal deterioration
- Low noise figure
- Low phase noise

Digital Upconverter Features:

- Upconverts a 44 MHz IF signal
- Converts all sub carrier channels (x.1, x.2, x.3 etc.)
- 8VSB or QAM modulated output
- Output channels from 54-860 MHz
- Front panel controls

Description:

The CT-DDC & CT-DUC digital downconverters and upconverters have been carefully designed by Cabletronix to integrate digital off air channels into any private cable system. The CT-DDC digital downconverter converts a digital off air or CATV input to a 44 MHz IF signal. The CT-DUC digital upconverter accepts the 44 MHz IF signal and converts it to an 8VSB or QAM output signal on a CATV channel from 2-135 or an off air channel from 2-69. All sub carrier channels (x.1, x.2, x.3 etc.) are included in the conversion. Each unit occupies a single space in a 12 unit rack chassis allowing up to 6 channels to be integrated in a single chassis occupying 2 rack spaces (3.5"). The input modulation format (ATSC or QAM) is maintained from the downconverter to the upconverter (ex. QAM to QAM or ATSC to ATSC). These units do not convert digital off air signals (ATSC) to QAM modulated signals.



Digital Downconverter Specifications:

RF Input

Input Frequency Range:	54-864 MHz Off Air 2-69 CATV 2-135
Input Level Range:	-30 dBmV to +30 dBmV
Input Impedance:	75 Ohms
Noise Figure:	10 dB Typical
Image Rejection:	55 dB

IF Output

IF Frequency:	44 MHz
Level:	+30 dBmV, +/- 1dB
Impedance:	75 Ohms
IF Bandwidth:	6 MHz, SAW filtered
Carrier to Noise:	50 dB & +10 dB input

General

DC Power Input:	+12V +/-5% @ 275 mA +5V +/-5% @ 275 mA
Operating Temperature:	32°F to 122°F ambient
Size:	1"W x 3.5"H x 9.25"D
Weight:	0.77 lbs.

Ordering Information:

CT-DDC	Digital downconverter
CT-DUC	Digital upconverter
CTRC-12	Rack chassis for up to 12 units
CTPS-12	Power supply for up to 12 units
CTPS-12DUAL	Power supply with redundant automatic back up for up to 12 units

Digital Upconverter Specifications:

IF Input

Frequency:	44 MHz
Input Level:	+30 dBmV, +/-2dB
Input Impedance:	75 Ohms

RF Output

Frequency Range:	54-860 MHz Off Air 2-69 CATV 2-135
Output Level:	+45 dBmV
Adjustment Range:	15 dB
Broadband Noise:	-73 dBc @ +45 dBmV out
In Channel C/N:	63 dB @ +45 dBmV out
Spurious Outputs (5-900 MHz):	-60 dBc
Impedance:	75 Ohms

General

DC Power Input:	+12V +/-5% @ 300 mA +5V +/-5% @ 350 mA
Operating Temperature:	32°F to 122°F ambient
Size:	1"W x 3.5"H x 9.25"D
Weight:	0.77 lbs.