



PC-525

Description

Channel processor for the UHF band, designed to work with adjacent digital and analogue channels. High selectivity and automatic gain control (AGC). Compatible B/G, I, D/K and L standards.

Applications

For use in MATV installations of digital and analogue terrestrial TV where adjacent digital or analogue channels exist with very different levels. By selecting the same input and output channel, the processor works as a filter with AGC, handling the channels independently and eliminating interference. In this way, a perfect equalisation is obtained of all the channels received. By selecting different input and output channels, the processor functions as a programmable digital or analogue channel converter.

Characteristics

Each module consists of an intermediate frequency converter, a double surface acoustic wave filter (SAW) and channel converter. Adjustable frequency for analogue channels in steps of 250KHz, or for digital channels in steps of 1/6 of a MHz. Automatic gain control (AGC) of 30 dB. Permits a feed path to supply power to preamplifiers.

| CODE | | | 9050146 |
|-------------------------|------|--------------------------------|---|
| MODEL | | | PC-525 |
| Connection | | | F female |
| TV System | | | AM-TV / DVB-T |
| Input frequency range | MHz | | 47-862 |
| Output frequency range | MHz | | 47-862 |
| Bandwidth | MHz | | 7/8 |
| Frequency step I/O | MHz | | 0.25 AM-TV 0.5 DVB-T |
| I/O Offset | MHz | | -3/6, -2/6, -1/6, 0, 1/6, 2/6, 3/6 DVB-T |
| Input level | dBμV | max. | 85 AM-TV 75 DVB-T (dif. 16dB) |
| | | min. | 55 AM-TV 45 DVB-T |
| Output level | dBμV | | 83 ±3,0 |
| Output level stability | dB | | ±1 |
| Output level adjustment | dB | | 25 |
| Automatic gain control | dB | | >30 |
| Selectivity | dB | $f_C - f_{C±3,75 \text{ MHz}}$ | >7 7 MHz |
| | | $f_C - f_{C±7 \text{ MHz}}$ | >80 Bandwidth |
| | | $f_C - f_{C±4,25 \text{ MHz}}$ | >19 8 MHz |
| | | $f_C - f_{C±8 \text{ MHz}}$ | >80 Bandwidth |

Further specification on the following page

$C_n \cdot C_{n±1}$: $CV_n \cdot CA_n \cdot 1$ o $CA_n \cdot CV_n + 1$
 $C_n \cdot C_{n±2}$: $CV_n \cdot CA_n \cdot 2$ o $CA_n \cdot CV_n + 2$

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CHANNEL PROCESSING EQUIPMENT 905-PC



Channel processors



PC-525

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| CODE | | 9050146 | | | |
|--|--------------------|--|-----|------|-----------|
| MODEL | | PC-525 | | | |
| Channel flatness response | dB | ± 1 | | | |
| Frequency stability | KHz | ± 20 | | | |
| Multiplexing/diplexing through loss | dB | 1.4 $\pm 0,2$ / 0.8 $\pm 0,2$ | | | |
| Noise figure | dB | 13.5 $\pm 1,0$ | | | |
| Superious in band | dB | <58 | | | |
| Return loss | dB | >14 | | | |
| Phase noise | dBc/Hz | 80 @ 1KHz 84 @ 10KHz 99 @ 100KHz | | | |
| Equivalent noise degradation | dB | <1.0 | | | |
| DC path | V \equiv | 24 | | | |
| | mA | 60 | | | |
| Power supply | V \equiv | 3.3 | 5.2 | 12.0 | 24.0 |
| | mA | 350 | 250 | 120 | 0+Preamp. |
| Operating temperature close to equipment | $^{\circ}\text{C}$ | -10..+65 | | | |
| Room temperature with/without fan | $^{\circ}\text{C}$ | -10..+55/+45 | | | |
| Protection index | | IP 20C | | | |
| Units per packaging | | 1 | | | |
| Packing weight | Kg | 1,16 | | | |
| Packing dimensions | mm | 265 x 165 x 40 | | | |

Difference in levels with regard to adjacent channels.

Programmable with PS-011