

EN ISO9001

**Pascall**

**MULTI-CARRIER IF LINE  
COMPENSATING  
AMPLIFIER (Transmitting)**

[www.pascall.co.uk](http://www.pascall.co.uk)

## Multi-carrier IF Line Compensating Amplifier (Transmitting)

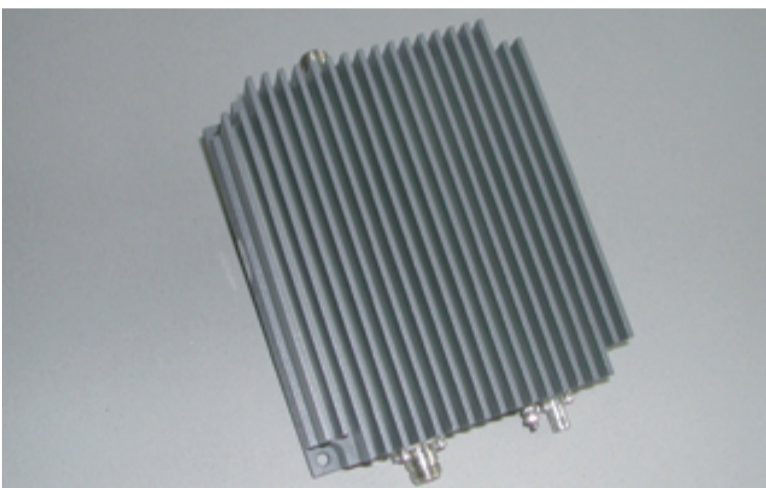
Reduces Installation Cost

MTBF 150,000 Hours

Excellent IM performance

Incorporates a Bias Tee

0.4ns Group Delay



Pascall Multicarrier Line Compensation Amplifiers provide IF gain and cable loss compensation for broadband microwave wireless systems. They are ideally suited for use in point to multipoint LMDS systems.

Significant installation cost savings can be achieved by the use of smaller diameter cable to connect the ground level enclosure to the masthead Transmitter or Transceiver.

Pascall Line Compensation Amplifiers minimise the effects of cable loss and cross-band slope without introducing any significant degradation of the multi-carrier signal.

Designed for operation from the standard telecommunications -48 volt DC supply, the amplifier incorporates a bias tee to enable DC power to be supplied to the masthead unit via the output IF cable.

Pascall is able to design other line compensating amplifiers to meet specific customers requirements for both civil and military applications.

A company within the Electronics  
Division of INTELEK plc

**INTELEK**



FM13274  
BS EN ISO 9001

## Multi-carrier IF Line Compensating Amplifier (Transmitting)

This amplifier incorporates a bias Tee for the supply of DC to masthead Transmitter unit.

### DATA

|   |   |
|---|---|
| Frequency Range                                 | 1050 to 1700 MHz min  |
| Input/Output Impedance                          | 50 Ohms   |
| Gain at 1050 MHz                                | 2.0, 4.5, 9.0 & 14.0 dB (Four switched settings)  |
| Gain Slope                                      | 2.0dB setting = +3.0dB<br>4.5dB setting = +4.0dB<br>9.0dB setting = +5.0dB<br>14 dB setting = +6.0dB            |
| Gain variation                                  | ±1.5dB of set value (W.R.T.Temp./Slope/Gain)  |
| Noise figure (at max.gain)                      | <8dB @ 25°C<br><9dB max.@ +50°C   |
| 1dB Compression point                           | +36 dBm min   |
| Output spurious<br>(Harmonics & IM Products)    | -40dBc inband with 12 carriers each at +15.5dBm<br>(relative to carriers)<br>Non harmonic & IM products <-80dBc |
| Group delay                                     | <0.4 ns, within any 36 MHz band   |
| VSWR (Input & Output)                           | 1.4 : 1 Max.  |
| Power delivery to masthead                      | Via RF output socket  |
| DC Input Voltage                                | -35 to -57.5V (-48V nominal)  |
| DC Input Current<br>(excluding masthead supply) | 300 mA at nominal voltage   |
| Max.DC delivery to RF O/P<br>socket (masthead)  | 2 Amps  |
| DC Power Input Noise<br>(DC to 20 MHz)          | 1.5 Volts p-p max (common code)   |
| MTBF  | >150,000 Hours  |
| Temperature                                     | - operating +5 to +40°C<br>- storage -40 to +85°C   |
| Humidity  | 5 to 90% RH   |

**Pascall**

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The right is reserved to amend the specifications of the products without notice

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