



Pascall's Quality System  
Is Registered Under  
BS EN ISO 9001



PM 13274  
BS EN ISO 9001

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WIRELESS COMMS

## HIGH DYNAMIC RANGE LOW NOISE AMPLIFIERS

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

### IP0<sup>3</sup> +50 dBm • P1dB +33dBm • NF <3.0 dB • Pin max. +25dBm • 10 MHz to 1GHz

The Pascall UWDR series of Broadband High Dynamic Range Amplifiers provide superb linearity, robust input characteristics and low noise performance making them ideally suited to broadband receiver applications.

The high intercept, and excellent group delay performance also make these amplifiers very suitable for many multi-carrier applications in broadband wireless systems.

The UWDR range is robustly constructed in lightweight aluminium alloy housings and designed to withstand harsh mechanical environments. All units operate over the case temperature range -45°C to +85°C and require a single rail dc input of 15 Volts.

Pascall are able to design models to meet customer's special requirements where the requirement is large enough to make this economically viable.

#### SPECIFICATION:

#### GAIN 14 dB

#### ADVANCE DATA:

#### GAIN 24 dB

##### HIGH DYNAMIC RANGE RECEIVER AMPLIFIER UWDR-01000-14-A22

(Please note these amplifiers require a heatsink or cold-wall for continuous operation)

|                                      |                    |
|--------------------------------------|--------------------|
| Frequency Range (min)                | 10-1000 MHz        |
| IP0 <sup>3</sup> (Full Band Typical) | +52 dBm            |
| IP0 <sup>2</sup> (Full Band Typical) | +62 dBm            |
| Maximum Input level (without damage) | +25 dBm            |
| Gain                                 | 14 ±1 dB           |
| Gain flatness with frequency         | ± 1 dB             |
| Noise Figure (above 100 MHz typical) | 2.8 dB             |
| Group Delay (over any 50 MHz band)   | 1ns max.           |
| P1dB (Typical)                       | +33 dBm            |
| Input VSWR (max)                     | 2:1                |
| Output VSWR (max)                    | 2:1                |
| Power Supply                         | +15Volts @ 1.0 Amp |
| Size                                 | 80 x 70 x 12 mm    |
| Connectors                           | SMA                |
| Case Temperature Range (operating)   | -45 to +85°C       |
| " " (storage)                        | -55 to +100°C      |

##### HIGH DYNAMIC RANGE RECEIVER AMPLIFIER UWDR-01000-24-A22

(Please note these amplifiers require a heatsink or cold-wall for continuous operation)

|                                      |                    |
|--------------------------------------|--------------------|
| Frequency Range                      | 10-1000 MHz        |
| IP3 (Full Band Typical)              | +52 dBm            |
| IP2 (Full Band Typical)              | +62 dBm            |
| Maximum Input (without Damage)       | +20 dBm            |
| Gain                                 | 24 ±1 dB           |
| Gain Flatness with frequency         | ± 1.0 dB           |
| Noise Figure (above 100 MHz typical) | 2.8 dB             |
| Group Delay (over any 50 MHz band)   | 1ns max.           |
| P1dB (Typical)                       | +33 dBm            |
| Input VSWR (max)                     | 2:1                |
| Output VSWR (max)                    | 2:1                |
| Power Supply                         | +15volts @ 1.2 Amp |
| Size                                 | 100 x 70 x 12 mm   |
| Connectors                           | SMA                |
| Case Temperature Range (operating)   | -45 to +85°C       |
| " " (storage)                        | -55 to +100°C      |