

Quad Polar LNB

4 Fully Switched Output CP/LP LNB



global **invacom**
completing the picture



QPH - 031



QPF - 031

The global **invacom** Quad Polar LNB is the first of its kind and provides 4 fully switched outputs, 2 linear polarized (vertical and horizontal) and 2 circular polarized (LHR and RHC). The **QPH** has a 40mm diameter collar to suit standard offset dishes, whilst the **QPF** (C120 flange) is for use with various types of feed horn, commonly fitted to prime focus dishes. Both LNBs are supplied with gaiters to create a weather-proof seal on the cable connections.

Specification

| | | | |
|---------------------------------------|-----------------|--|--|
| 1. Input Frequency | | 10. Image Rejection | >40 dB |
| FSS Band (linear polarization) | 11.7 - 12.2 GHz | 11. Isolation | |
| FSS Band (linear polarization) | 12.2 - 12.7 GHz | Cross Polar Isolation | >30 dB |
| BSS Band (circular polarization) | 12.2 - 12.7 GHz | High to Low Band Isolation | >23 dB |
| 2. Output Frequency | | 12. Two-tone 3rd Order Interception Point (output) | >10 dB |
| FSS Band | 950 - 1450 MHz | 13. Output Connector | 4 x Female F-type |
| BSS Band | 950 - 1450 MHz | Impedance | 75 Ohm |
| 3. Noise Figure | | Return Loss | >10 dB |
| QPH-031 | 0.3 dB typ | 14. Operating Temperature Range | -40°C to +70°C |
| QPF-031 | 0.3 dB typ | Storage Temperature Range | -40°C to +70°C |
| 4. Gain | 50 - 60 dB | 15. Band Polarization Selection | |
| 5. Gain Ripple | | Signals applied to F-type connector | |
| 26 MHz bandwidth | <+/- 0.5 dB | Ports 1 and 3 Linear Polarization | |
| CP Band | <5 dB typ | Vertical | 11.5V to 14V |
| LP Band | <5 dB typ | Horizontal | 15.5V to 19V |
| 6. Local Oscillator Frequency | | Ports 2 and 4 Circular Polarization | |
| Low Band | 10.75 GHz | Right hand CP | 11.5V to 14V |
| High Band | 11.25 GHz | Left hand CP | 15.5V to 19V |
| 7. Local Oscillator Phase Noise (typ) | | 16. Spurious | |
| 1 kHz | -65 dBc/Hz | Primarily 1000 MHz and 500 MHz | <-65 dBm |
| 10 kHz | -95 dBc/Hz | 17. Output Gain Difference | |
| 100 kHz | -110 dBc/Hz | (between the outputs in 26MHz Bandwidth) | <6 dB |
| 8. Local Oscillator Stability | +/- 1 MHz typ | 18. QPF - 031 Interface | 18.5mm Ø Waveguide, C120 Flange |
| 9. Current Consumption | | QPH - 031 | Off-set Parabola Matched, Frequency Compensated Feed Horn, 40mm Dish Clamp |
| One Receiver | 200mA typ | | |
| Each Additional Receiver | 30mA typ | | |