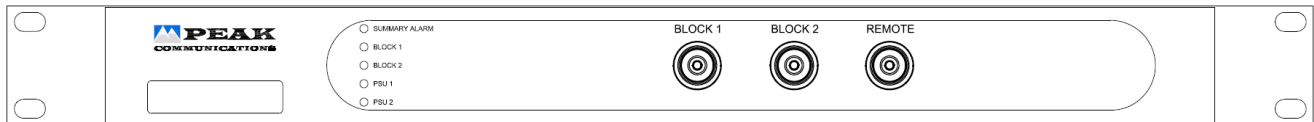


D502

Dual-channel LNB driver unit with remote control



The **D502** dual-channel driver unit is designed to supply DC power and/ or a reference frequency to a low noise block (LNB). These units are ideal in the situation where the connecting modulator cannot supply a suitable external DC supply or when the modulator reference frequency is either unavailable or has insufficient stability for the application. The driver units are 19-inch rack mounted and are powered from a wide input range AC supply.

The **D502** unit is designed for use with one or two LNB's. These units can supply single or dual range (voltage switching) up to +18VDC at typically 500mA and incorporate a locking reference signal of typically 10MHz. The supply to the LNB is via the L-Band connection and comprises the DC, reference and the received L-Band signal.

Peak Features

-  Dual feed's supporting two LNB's
-  Optional back-up reference drive generation & external reference input with automatic detection
-  DC drive with current sensing and user settable alarm levels
-  DC drive of typically +13VDC/ +18VDC, dual range 'voltage switching', with front panel controls
-  Redundant power supplies with dual mains input, as standard
-  Ethernet remote control with embedded web server & supporting SNMP, as standard
-  Optional internally generated 22kHz tone oscillator for range switching



D502 – Typical specification;

L-Band interface specification

L-Band frequency 800 - 2400MHz

Note; if options 2/3/4/4c are ordered, the frequency range is limited to 950-2150MHz.

L-Band connection N-type (f), 50Ohm

Insertion loss $\leq 1\text{dB}$

Maximum input +16dBm

Return loss (Input) 13dB minimum

Return loss (Output) 13dB minimum

DC drive generation

Drive Fed to LNB(s) on L-Band co-axial cable

Voltage Switched voltage +13VDC/ +18VDC fed via L-Band for dual range LNB's

Note; includes front panel push switch to cycle between states.

Current 500mA typ. (for higher please consult the factory)

22kHz tone generation (Option 10)

22kHz tone at 0.5V peak to peak, selectable on /off

Reference drive generation (Option 2)

Drive 10MHz fed to the LNB(s) on L-Band co-axial cable

Note; for other frequencies (5, 50 & 100MHz), please consult factory

Power 0dBm +/-3dB

Stability $< 5 \times 10^{-10}$ over 1s, $< 5 \times 10^{-9}$ per day

Ageing $< 5 \times 10^{-7}$ per year

Temp stability $< 5 \times 10^{-8}$ over 0 to 50°C

High stability (Option 3)

Stability $< 2 \times 10^{-12}$ over 1s, $< 2 \times 10^{-10}$ per day

Ageing $< 2 \times 10^{-8}$ per year

Temp stability $< 2 \times 10^{-9}$ over 0 to 50°C

External reference input (Option 4)

Offered with automatic detection & locking facility (only available with option 2).

Frequency 10MHz (5MHz factory settable)

Level 0dBm $\pm 5\text{dB}$

Connector SMA (f), 50Ohm

External reference pass-through (Option 4c)

External reference input via rear panel discrete connection, passed through to LNB's via the L-Band co-axial cable (no internal back-up reference).

Frequency 10MHz (5MHz factory settable)

Level 0dBm $\pm 5\text{dB}$

Note; internal throughput loss typically 4dB.

Connector SMA (f), 50Ohm

Mechanical

Width 19" standard rack mountable

Height 1U (1.75")

Depth 400mm (15.8"), plus connectors

Construction Aluminium chassis

Weight 4kgs (8.8lbs)

Environmental

Operating temp. 0°C to +50°C

EMC EN 55022, part B & EN 50082-1

Safety EN 60950

Power supply (2off redundant)

Voltage 90-264VAC

Frequency 47-63Hz

Total power 20 Watts typ., depending upon DC drive option

Redundancy Provides a redundant power supply

Control system interface

Remote control Ethernet; embedded web server & SNMP network management support

Discrete 'alarms interface' Summary alarm of;

Detected current

Power supply

Internal &/or external reference failure

Alarm inputs Summary alarm input via D-Type connections

Options

2) LNB reference drive generation (10MHz) on the L-Band

3) High stability internal reference generator

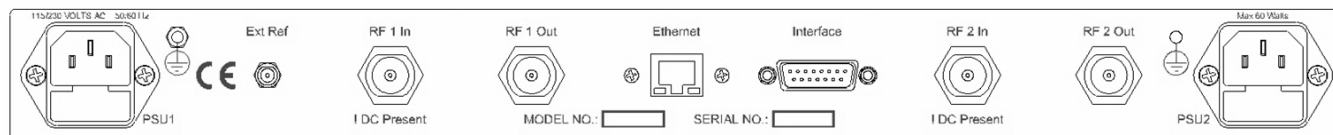
4) External reference input (only available with option 2)

4c) External reference input passed-through to LNB's

10) Internally generated 22kHz tone oscillator

Note; the addition of options can modify the typical specification, for details please consult the factory.

Rear panel view (sample)



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. D502-191020.

Peak Communications Ltd., Unit 1, The Woodvale Centre, Woodvale Road, Brighouse, West Yorkshire, HD6 4AB, U.K.

Tel; +44 (0)1484 714200 Sales; +44 (0)1484 714229 Fax; +44 (0)1484 723666 Email; sales@peakcom.co.uk Web; www.peakcom.co.uk