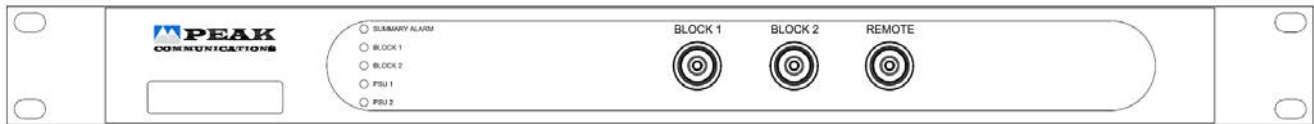


## D502

### 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

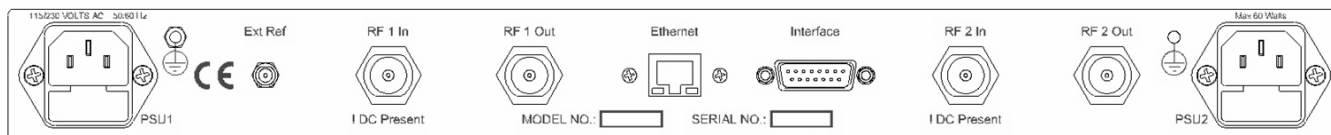
4) External reference input (only available with option 2)

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)



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