

D400H and D600H BUC/ BDC/ LNB driver units









The **D400H** & **D600H** driver units are flexible and configurable to customer specific requirements. They are designed to supply DC power with current monitoring and/ or a reference frequency to a remote mounted block down converter (BDC), low noise block (LNB) or block up converter (BUC). 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 **D400H** unit is designed for use with a **BDC or LNB**. These units can supply up to 24VDC at typically 500mA and can incorporate a locking reference frequency of typically 10MHz. The supply to the BDC/ LNB is a composite of DC, reference and the received L-Band signal. The output of the D400H unit is the received L-Band signal.

The **D600H** units are designed for use with a **BUC**. These units can supply up to 24VDC at typically 500mA and can incorporate a locking reference frequency of typically 10MHz. The input of the D600H unit is the L-Band signal to be transmitted. The supply to the BUC is a composite of DC, reference and the L-Band signal to be transmitted.

Peak Features

-  Optional multiple L-Band inputs on the **D400H** or outputs on the **D600H**
-  Optional high stability reference system
-  Optional DC drive of typically 13-24VDC, with current monitoring and user settable alarms
-  Multi-range, voltage & 22kHz tone switching available
-  Optional redundant power supplies with dual mains inputs
-  Full alarm monitoring



D400H, D600H – Typical specification;

L-Band interface specification

Note; applicable with options 1, 1b, 1c, 1d & 2

L-Band frequency	900 - 2150MHz
L-Band connection	N-type (f), 50Ohm
Option 5a;	dual L-Band channels (additional channel)
Option 5b;	quad L-Band channels (additional 3off channels)
Insertion loss	2dB
Note; for amplification options please consult the factory (Option 6)	
Maximum input	+16dBm

DC drive generation (Option 1)

Drive	Fed to BUC/BDC/LNB on L-Band co-axial cable, includes current monitoring and user settable level 'alarms'
Option 1a;	Fed via a separate, 9-way, D-Type connector
Voltage	+13 to +24VDC (factory settable, please specify on order)
Current	750mA typ. (for higher please consult the factory)
Option 1b;	+27VDC @ 1.5A, suitable for multi-range/ band BUC/BDC units
Option 1c;	Switched voltage +13VDC/ +18VDC fed via L-Band for dual range LNB's
Option 1d;	+24VDC @ 2.5A, suitable for higher power BUC drive.
Option 1e;	+48VDC @ 4A, suitable for higher power BUC drive.
Option 1f;	Switched voltage/ tone +13VDC/ +18VDC & 22kHz fed via L-Band for multi range LNB's

Note; Opt1c & 1f include front panel range switching controls.

Reference drive generation (Option 2)

Drive	10MHz fed to BUC/BDC/LNB on L-Band co-axial cable
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Note; for other frequencies (5, 50 & 100MHz), please consult factory

Power	0dBm +/-3dB
Stability	<5x10 ⁻¹⁰ over 1s, <5x10 ⁻⁹ per day
Ageing	<5 x 10 ⁻⁷ per year
Temp stability	<5 x 10 ⁻⁸ over 0 to 50°C

High stability (Option 3)

Stability	<2x10 ⁻¹² over 1s, <2x10 ⁻¹⁰ per day
Ageing	<2 x 10 ⁻⁸ per year
Temp stability	<2 x 10 ⁻⁹ over 0 to 50°C

External reference input (Option 4) with auto detection

Note; only available with option 2

Frequency	10MHz (5MHz factory settable)
Level	0dBm ±3dB
Connector	SMA (f), 50Ohm
Option 4b;	Input via L-Band (from Modem)

Electronically variable L-Band attenuation (Option 10)

Attenuation range	30dB
Step size	0.1dB or 0.5dB
Control	Electronically variable via local (front panel) & remote control

Note; attenuator typically fitted to common input (splitter) or output (combiner).

Mechanical

Width	19" standard rack mountable
Height	1U (1.75")
Depth	~400mm (15.7"), plus connectors
Construction	Aluminium chassis
Weight	4-6kgs (9-13lbs) approx., option dependent

Environmental

Operating temp	0°C to +50°C
EMC	EN 55022, part B & EN 50082-1
Safety	EN 60950

Power supply (2off redundant with Option 7)

Voltage	90-264VAC
Frequency	47-63Hz
Total power	50 Watts typ., depending upon DC drive option
Redundancy (Option 7)	Provides a redundant power supply configuration with separate prime power inputs

Control system interface

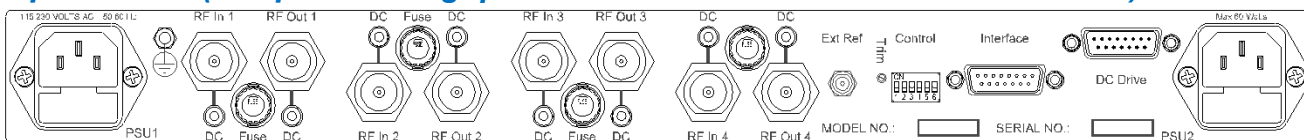
Remote control	RS232/RS485 port
Option 9;	Ethernet; embedded web server & SNMP network management support
Discrete 'alarms interface'	PSU failure Summary alarm

Options

- +17 to +24VDC@750mA drive on L-Band
 - DC drive via separate connector
 - +27VDC@1.5A drive on L-Band
 - 13/18VDC switched voltage on L-Band (dual range LNB's)
 - +24VDC@2.5A drive on L-Band
 - +48VDC@4A drive on L-Band
 - 13/18VDC, 22kHz tone switched on L-Band (multi-range LNB's)
 - Reference drive generator (10MHz) on L-Band
 - High stability internal reference generator
 - External reference input via separate connection
 - External reference input via L-Band (from Modem)
 - Dual TX/RX L-Band interfaces
 - Quad TX/RX L-Band interfaces
 - L-Band amplification (please consult the factory, stating the requirement)
 - Redundant power supplies
 - Ethernet interface with embedded web server & SNMP
 - Electronic attenuator, 0-30dB (0.5dB steps), at L-Band
 - Electronic attenuator, 0-30dB (0.1dB steps), at L-Band
- Note; the addition of options can modify the typical specification, for details please consult the factory



Rear panel view (sample showing quad channel version and redundant PSU's)



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. D400H,600H-200120.

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