

## D400H and D600H series BUC/ BDC/ LNB driver units



<b>D401H, D601H</b>	single-channel units
<b>D402H, D602H</b>	dual-channel units
<b>D403H, D603H</b>	triple-channel units
<b>D404H, D604H</b>	quad-channel units

The **D400H** & **D600H** series driver units are available in up to quad-channel in 1RU and are 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** series units are designed for use with **BDC's or LNB's**. 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** series units are designed for use with **BUC's**. 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

-  Available in up to 4-channels in 1RU
-  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 series – Typical specification;

### L-Band interface specification

L-Band frequency	900 - 2150MHz
L-Band connection	N-type (f), 50Ohm
Insertion loss	2dB
<i>Note; for amplification options please consult the factory (Option 6)</i>	
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
Option 1g;	Switched voltage/ tone +13VDC/ +18VDC /+24VDC & 22kHz fed via L-Band for multi range LNB's

*Note; Opt1c, 1f & 1g include front panel range switching control.*

### 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 <sup>-10</sup> over 1s, <5x10 <sup>-9</sup> per day
Ageing	<5 x 10 <sup>-7</sup> per year
Temp stability	<5 x 10 <sup>-8</sup> over 0 to 50°C

#### High stability (Option 3)

Stability	<2x10 <sup>-12</sup> over 1s, <2x10 <sup>-10</sup> per day
Ageing	<2 x 10 <sup>-8</sup> per year
Temp stability	<2 x 10 <sup>-9</sup> 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; 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)
- 13/18/24VDC, 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)
- L-Band amplification (please consult the factory, stating the requirement)
- Redundant power supplies
- Ethernet interface with embedded web server & SNMP
- 10a) Electronic attenuator, 0-30dB (0.5dB steps), at L-Band
- 10b) 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)**

