

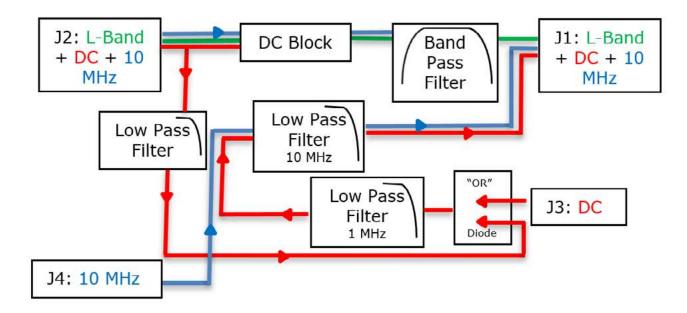
## **Orbital DC Thru Diplexer**



The Orbital DC Thru Diplexer (DTD-10) is a bias tee thruplexer that inserts a high-quality 10 MHz source into your LNB or BUC – in addition to passing both L-band and DC power from the modem with very low insertion loss. This small and compact device is easy to mount, can be used outdoors, and can be customized with any connector.

- Inserts high-performance 10 MHz external reference
- Internal filters for DC and 10 MHz noise
- Modem 10 MHz block filters
- Optional DC input port for redundancy
- Extremely low thru loss and very high return loss

By introducing a high-quality external reference, our DC Thru Diplexer can help you reduce phase noise and increase the data throughput of your satellite terminals. It can also provide DC redundancy for LNBs or BUCs – by using the modem's DC plus an optional external DC source – and increase system availability. This device is primarily designed for the satellite communications industry but is also a good fit for 4G and 5G cellular networks.



### MODEL NUMBER: DTD10



#### ELECTRICAL

L Band	
Bandpass	DC & 900 to 2100 MHz
Thru Loss	1.0 dB maximum
Ripple	±0.5 dB maximum
Input VSWR	1.5 : 1 maximum
Output VSWR	1.5 : 1 maximum
DC	
Filtering	Hash filter, low pass filter
Resistance	0.132 ohms (average)

#### MECHANICAL

Measurements	Tolerance ±.005 in.
Size (case)	3.425l x 2.55w x 0.88h in.
Size (with conn)	3.425l x 3.8w x 0.88h in.
Weight	5 oz
Paint / Colour	Blue anodized finish
Mounting holes	3/8" (5mm) Accepts standard rackmounting screws 10/32 or 10/34

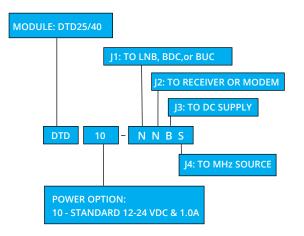
POWER SPECIFICATIONS	
Input DC Voltage	Passive device No power required
Power Capacity	12 to 24 VDC - 1.0A
SWITCHING POWER SUPPLY	
(not included with DC Thru Diplexer)	
See:	PS1 brochure for N. America PS2 brochure for Global
CONNECTORS AVAILABLE	
J1, J2: L-Band ports	S - SMA 50Ω F - F, 75Ω N - N, 50Ω
J3: DC Supply	B - BNC (preferred) S - SMA N - N T - TNC ft - feedthru
J4: 10 MHz	S - SMA (recommended) B - BNC N - N T - TNC

#### ENVIRONMENTAL

Operating Temp Relative Humidity

-40 to +60° Celsius Up to 100% condensation and frost

#### HOW TO ORDER



# For more information to order, please contact us at sales@orbitalresearch.net