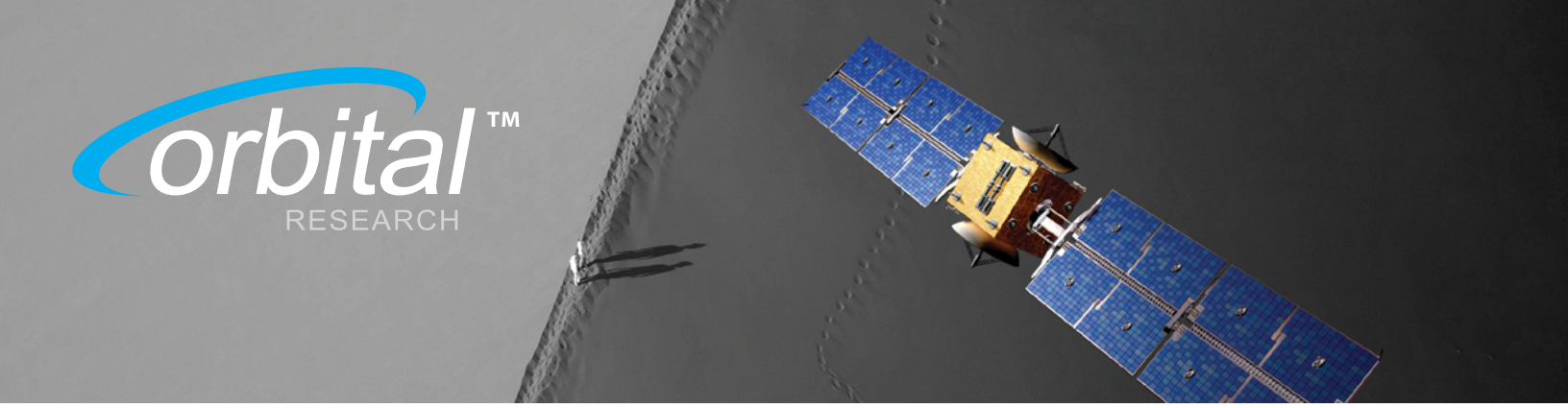


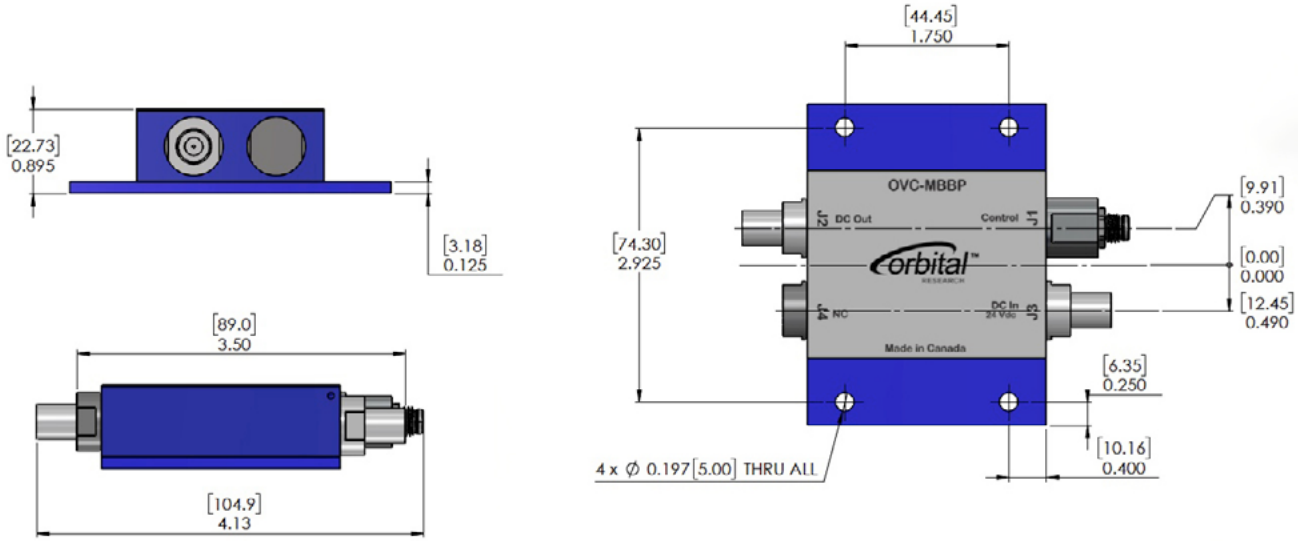
Orbital LNB Voltage Controller

Switch the frequency band of your LNB or BDC via voltage – from anywhere – with the Orbital Research Voltage Controller. This product is designed for any satellite terminal that uses multi-band frequency converters – and is perfect for redundant systems or installations with modems that do not support voltage switching. As a bonus, the Voltage Controller will also boost DC voltage on long cable runs and clean up the input power to provide an ultra-low-noise power source.

Features include:

- User selection of 1 of 3 voltage outputs via contact closure or voltage to remotely switch bands
- Ultra-low-noise linear supply (80 dB) for excellent Power Supply Rejection Ratio (PSRR)
- IP67 rated for harsh outdoor applications
- Input voltage via quick-disconnect connectors – no soldering
- Choice of connector types to fit any implementation
- -40C to +80C for operation in any environment
- Optional output voltage LED indication

Mechanical Drawing



MODEL NUMBER: OVC

HOW TO ORDER

Module: OVC – Orbital Voltage Controller

J1: Control Port

Switchable Voltage Levels

OVC-MBBP-13-18-22

J2: DC Output

J3: DC Input

J4: Unused - Plug

PORT CONNECTOR OPTIONS

J1: M8-4 Control Port

J2 & J3: B – BNC, N – N, S – SMA, T – TNC

J4: P – Plug

SWITCHABLE FACTORY-SET OUTPUT VOLTAGE LEVELS

Select three voltages between 5 and 24 VDC

ENVIRONMENTAL

Operating Temp Range	-40C to +80C
Non-Operating Temp Range	-60C to +80C
Humidity	100%
IP67 rated for harsh outdoor applications	
RoHs & Reach Compliant	

MECHANICAL

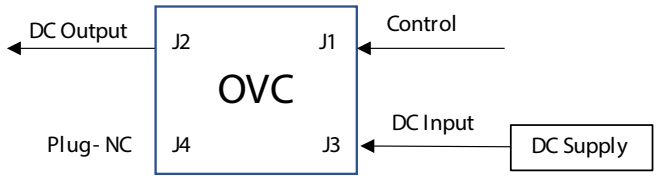
Weight	7.75 oz
Length	3.425 inches
Width	2.55 inches
Depth	0.88 inches
Mounting Holes	0.200 inches

POWER

Input Voltage Range	24 to 40 VDC
PSRR	80 dB
Output Current Limit	0.5A

*Factory adjustable

BLOCK DIAGRAM



VOLTAGE CONTROL OPTIONS

Contact closure via J1

External switch control – optional

Voltage control – optional

SWITCHABLE FACTORY-SET OUTPUT VOLTAGE LEVELS

Stack the Orbital Voltage Controller with any of our system interface products (SIPs) – bias tees, Mux-Tees and oscillators – to create a unified system for any SATCOM installation. Browse our SIPs here: https://orbitalresearch.net/products/sips

APPLICATIONS

Organizations with LNBs or BDCs that support band switching via the input voltage range can use the Orbital Voltage Controller to remotely select the desired frequency band. Orbital Research includes this functionality in all our redundant systems.

Long cable runs to devices like LNBs and BDCs can result in voltage loss or droop, affecting the performance of the end device. The Orbital Voltage Controller can operate as a step-up supply in this case or a step-down supply as required. Additionally, the product will clean up dirty power supplies for excellent PSRR.

Mobile applications where sensitive electronics like LNBs are powered by batteries or generators are also prime candidates. Clean and stable power provided via the Orbital Voltage Controller will keep electronics in peak operating condition.

Lab use is another key application as one Orbital Voltage Controller can provide ultra-low noise power with user-selectable voltages to test almost any system. Eliminating power supply noise can help isolate problems and provide the true RF performance of the device being tested.

For more information or to request a free technical report, please contact us at sales@orbitalresearch.net or (604) 419-8585