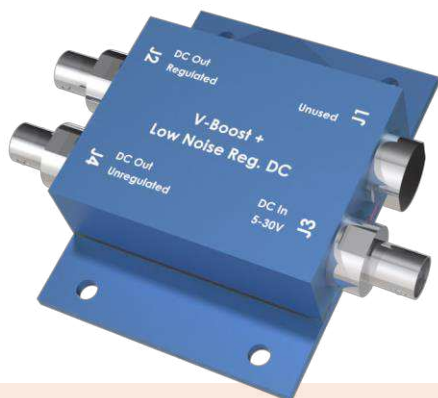


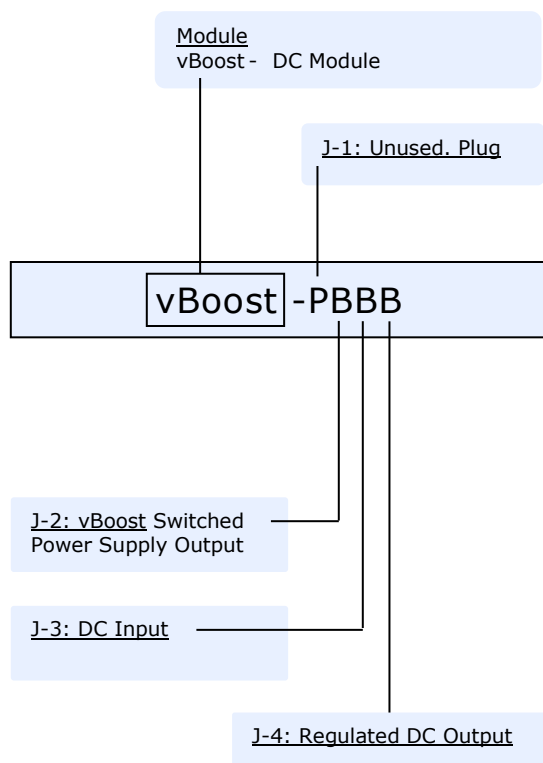
System Interface Products

vBoost – DC voltage booster and regulator



Input 5 to 30 VDC, regulated output

How to order a vBoost – DC Module



Connectors available:

J2, J3, J4: DC Input/Output

B - BNC (preferred) N - N
S - SMA T - TNC
ft - feedthru

BNC-to-pigtail adapters and BNC-to-binding post adapters sold separately. See SIP price list for part number and price.

Orbital Design:

Power continues to be a problem in terms of supplying different voltages to separate parts, or loss of voltage because of voltage droop on cable runs.

To help in alleviating that, Orbital has designed the vBoost power supply. It can take a DC voltage input anywhere in the range of 5 to 30 VDC and provide two DC outputs:

1. An Ultra Low-Noise Regulated output, 5 to 20 VDC out
2. A Switching Power Supply output, 5 to 30 VDC out

Attention:

The Switching Power Supply output must be at least 0.5 VDC above the Ultra Low-Noise (ULN) output.

Orbital Features:

Functional

- Will operate with Orbital SIP modules, LNBS, BDCs, BUCs, Rxs and Modems
- Output DC levels set when ordering. No adjustments in the field. However, input DC levels can fluctuate and change as long as they are within the 5 to 30 VDC range.
- O-ring sealed connectors and Hylomar sealed enclosure

Structural

- The system mounts out at the dish, out of the way, providing protection from long cable runs with voltage droop.
- Diode protection to prevent accidental reverse polarity DC.
- Solid billet milled box and lid.
- Blue Anodized finish, MIL-STD-595
- RoHS & REACH compliant

Sales contact:

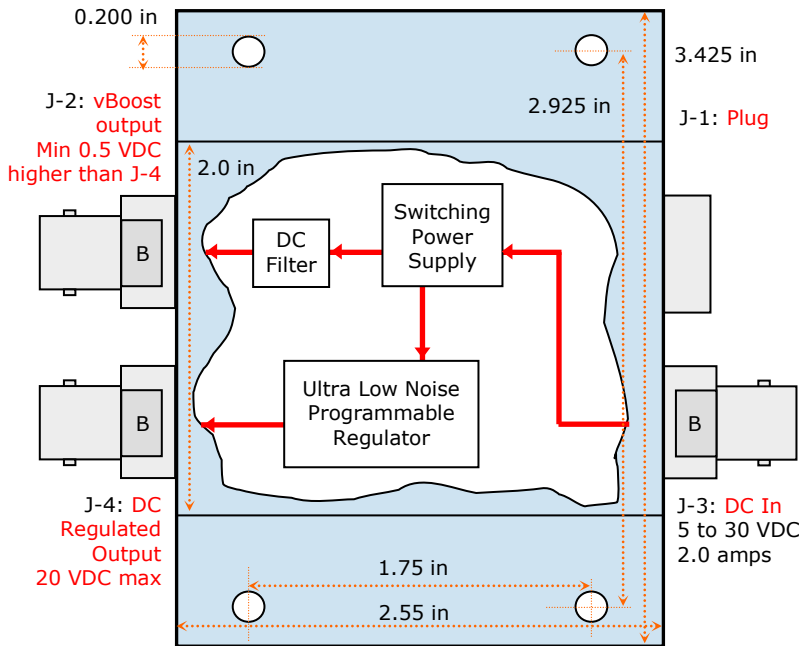
sales@orbitalresearch.net

1 604 419-8585

www.orbitalresearch.net

SIP: vBoost – DC voltage booster Module Specifications

**Orbital vBoost DC Power Module
Mechanical Dimensions +
Functional Block Diagram
Viewed from the top**



Applications

LNB Power Used with our MuxTees, the vBoost module makes sure that the LNB always has enough power to operate, no matter the input voltage (within 5 to 30 VDC).

BUC Power Likewise, a BUC is no longer hampered by cable droop due to long cable runs, temperature fluctuations or poor quality cable. The vBoost will supply a constant voltage.

Long cable runs Cable droop effects the amount of DC getting to the

Modems The power supplies in modems often cannot power higher wattage BUCs, but with this box, you can add higher wattage power supplies.

Master Osc Providing the master 10 MHz Oscillator with accurate, clean, constant power at all times is crucial. This box prevents an Oscillator from overheating, and system loss of lock.

Generic Any device that accepts an external DC input from 5 to 30 VDC can use this device to ensure clean and accurate voltage – at the device.

The vBoost can boost the voltage to be above the power supply's voltage. Ie: power supply is only 12 VDC but need 18 VDC for LNB. This can solve mixed voltage systems that only have one voltage level.

Environmental Specifications

Operating Temp: -40 to +60° Celsius
Relative Humidity: Up to 100% condensation and frost

Mechanical Specifications

Measurements: Tolerance ± 0.005 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 / Color: Blue Anodized finish
MIL-STD-595
Mounting holes: 0.200" (5mm)
Accepts standard rackmounting screws:
10/32 or 10/34
Compliances: RoHs & REACH

Electrical Specifications

Input Voltage Range: 5 to 30 VDC

Output Voltage

J2: SPS: 5 to 30 VDC
J4: ULN regulated: 5 to 20 VDC

Current Capacity: 2 A (call Orbital for higher power)

Switching Power Supply (optional)

See PS1 or PS2 brochure for ordering information

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