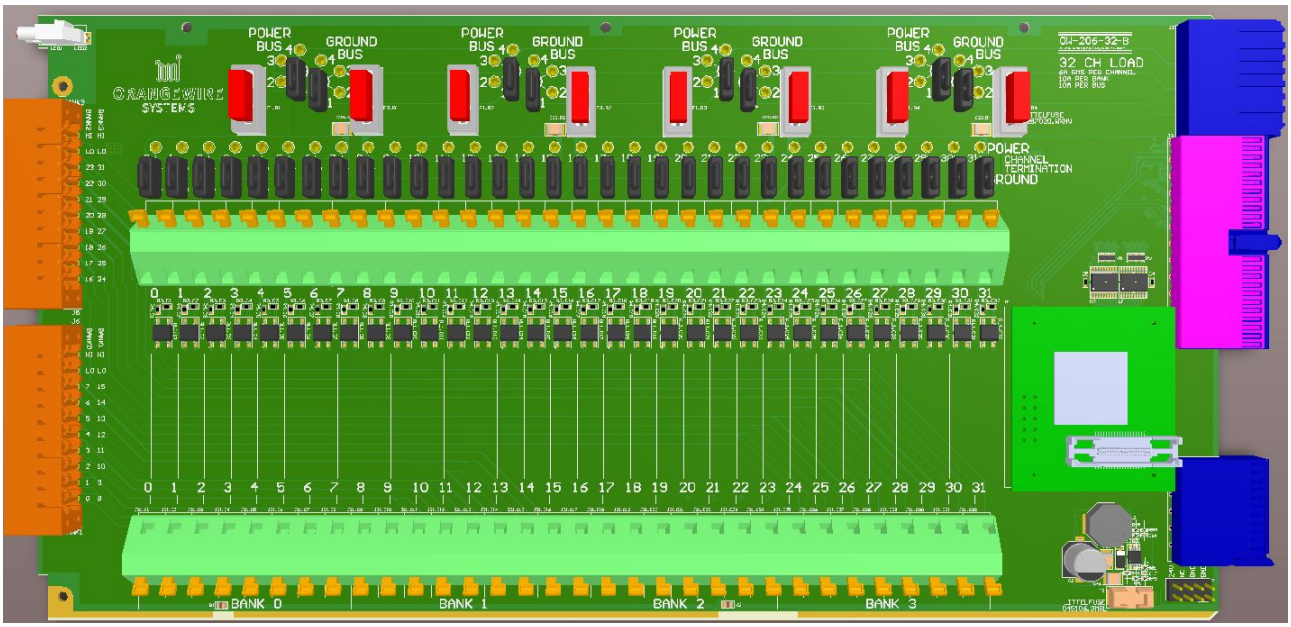
ORANGEWIRE
SYSTEMS

Datasheet
OW-206-32
32 Channel Load Board



ORANGEWIRE
SYSTEMS

Overview

The OW-206-32 is a 32-channel load card that provides the ability to connect up to 15W electrical loads in laboratory or production test applications.

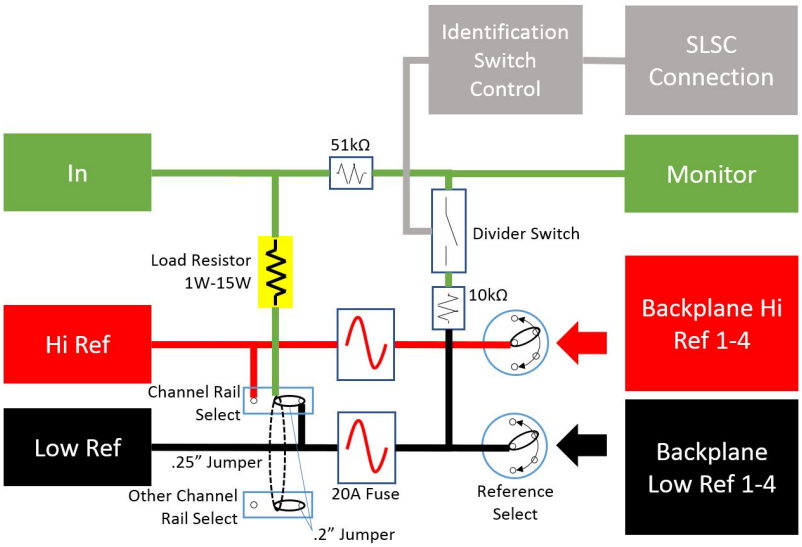
- 32-channel load
- For NI SLSC system
- For DET HIL simulation
- 6A per channel
- 10A total bank current
- 0-60V operational range
- Use with NI PXI or CompactRIO for channel monitoring

The OW-206-32 is designed for the National Instruments (NI) Switch Load Signal Conditioning (SLSC) system, to be used in Hardware-In-the-Loop (HIL) simulators. This card is used to test prototype or production Electronic Control Units (ECUs or generically Devices Under Test or DUTs) for the purposes of developing, verifying, and validating software and hardware.

The OW-206-32 installs in a single SLSC chassis slot. One side of each load connects to the Device Under Test (DUT) through the front panel, the other side of the load terminates to optionally: another channel, simulator power, or simulator ground.

32 Channels are grouped into 4 banks (0-3) of 8 channels each. Each bank shares a common high reference rail, and a common low reference rail, so loads can terminate to different power sources or sinks. Reference rails are connected to the OrangeWire OW-130 Signal Midplane, which connects to the simulator power source. The selected high and low reference rails for each bank also connect to the front panel for monitoring, or as an additional place to source or sink power.

The load board also connects to software (NI Veristand, LabVIEW, TestStand) through the SLSC communications bus. With the software connection, the board can trigger the proper test configuration for a particular DUT on chassis boot, thus reducing time consuming setup and configuration operations.



ORANGEWIRE SYSTEMS

Application Information

The OW-206-32 is used to provide equivalent loads in hardware in the Loop applications. Typical uses include cases where:

- DUT must to detect a certain load to enable functionality.
- DUT must to demonstrate capability to source power to a simulated load.

Specifications

Absolute Maximum Ratings	
Load Current Through Channel	6A Continuous or RMS
Load Current Total any Bank	10A (20A Fuse)
Load Current Total any Reference Rail (all banks)	10A
Voltage	300V transient (60V operational)