



Date: 12/2/2024

NI 4300 and NI 4350 Specification Addendum:

The specifications provided in this document supersede those in the existing specification documents, manuals, and datasheets for the following NI 43xx system Part Numbers:

- NI 4300 Control (PN: 1109358, manual 09-0334)
- NI 4350 Load (PN: 1109331, 1109350, 1109352, manual 09-0315)

Updated Specifications:

Compliance Icons



Caution: Take precautions to avoid injury. Consult the product documentation for cautionary statements when you see this icon printed on the product.



Caution: Possibility of Electric Shock: Take precautions to avoid electrical shock.

Safety Guidelines for Hazardous Voltages

If hazardous voltages are connected to the product, take the following precautions. A hazardous voltage is a voltage greater than 30 VRMS, 42.4 Vpeak, or 60 VDC.



Caution: Possibility of Electric Shock: Ensure that hazardous voltage wiring is performed only by qualified personnel.






Caution: Possibility of Electric Shock: All wiring must be insulated for the highest voltage used.



NI 4300 Control (PN: 1109358)

- Logic level output signals: DOUT's are rated for ± 60 VDC, 300mA, with functional isolation only to Earth/Bus.

NI 4350 Load (PN: 1109331, 1109350, 1109352)

- Load Power + to -, Volt Sense + to -: 450 VDC max.
- I/O Channels, Channel to Channel isolation: Functional isolation only
 -  **Caution: Possibility of Electric Shock:** Do not mix hazardous voltage circuits and human-accessible circuits on the same product.
- I/O Channels to Earth/Bus isolation (common-mode), continuous: 450 VDC max.
 -  **Caution: Possibility of Electric Shock:** Load Power + and -, Volt Sense, DINS, DOUTS, OVPS, ICTRL/IMON must not float or be referenced above earth more than the continuous isolation rating to maintain safety isolation.
 -  **Caution: Possibility of Electric Shock:** When product terminals are hazardous voltage LIVE, you must ensure that devices and circuits connected to the product are properly insulated from human contact.



Reference - Impacted Original Specifications:

The following specifications show the original specifications in the user manuals which are superseded by this addendum.

NI 4300 Control (PN: 1109358, manual 09-0334)

Section 3.6 - System Control

- DOUT's are rated for ± 100 VDC, 300 mA.

Section 4.8 - DOUTS Connector in rear (System Control Card p/n 15-1895-00)

- DOUT's are rated for ± 100 VDC, 300 mA. DOUT's are isolated from the chassis and each other up to ± 120 VDC.

NI 4350 Load (PN: 1109331, 1109350, 1109352, manual 09-0315)

Section 3.5 – Isolation

- +/- 1000 VDC from AC power input to load or chassis ground.
- ± 600 VDC from load to chassis ground.

Section 3.13 - Voltage Sense

- The voltage sense is fully protected against reverse input and over voltage conditions up to the full load rating. Isolation rating is ± 600 VDC from the load or chassis.

Section 3.16 - Digital Input

- DIN's are isolated from the load and chassis up to ± 600 VDC. DIN's are isolated from DOUT's up to ± 120 VDC.

Section 3.17 - Digital Output

- DOUT's are isolated from the load and chassis up to ± 600 VDC. DOUT's are isolated from DIN's up to ± 120 VDC.



Section 4.4 - DOUTS Terminal Block in front

- DOUT's are isolated from the load and chassis up to ± 600 VDC. DOUT's are isolated from each other and DIN's up to ± 120 VDC.

Section 4.5 - DINS Terminal Block

- DIN's are isolated from the load and chassis up to ± 600 VDC. DIN's are isolated from DOUT's up to ± 120 VDC.