NEOVOLTA

# Technical Notes

**Approved NV7600 Inverter and NVPlus Battery Configurations**

| DATE CREATED: | TN NUMBER: | PREPARED BY: |
|---|---|---|
| 10/14/2025 | TN-NV7600&NVPlus-10.2-001 | Patrick Honegger |

**Approved Inverter and Battery Configurations per UL9540 Report**

The following inverter and battery configurations have been certified in accordance with the UL9540 standard:

- A maximum of four (4) NV7600 inverters may be connected in parallel.
- A maximum of five (5) NVPlus-10.2 batteries may be configured in parallel.

For systems that incorporate more than two (2) NV7600 inverters and/or more than three (3) NVPlus-10.2 batteries, the installation of a common battery DC bus is required to ensure compliance, operational efficiency and system safety.

**Inverter and Battery Configuration Guidelines:**

The following inverter and battery pairings are supported within standard system parameters:

- (1) NV7600 inverter with (1) NVPlus-10.2 battery
- (1) NV7600 inverter with (2) NVPlus –10.2batteries
- (1) NV7600 inverter with (3) NVPlus-10.2 batteries
- (1) NV7600 inverter with (4) NVPlus-10.2 batteries
- (2) NV7600 inverters with (3) NVPlus-10.2 batteries

Note: The internal DC bus of each battery is rated for a maximum current of 250A.
It is recommended to install at least three (3) NVPlus-10.2 batteries when configuring two (2) NV7600 inverters to ensure full backup power capability.

**Configurations Requiring a Common Battery DC Bus:**

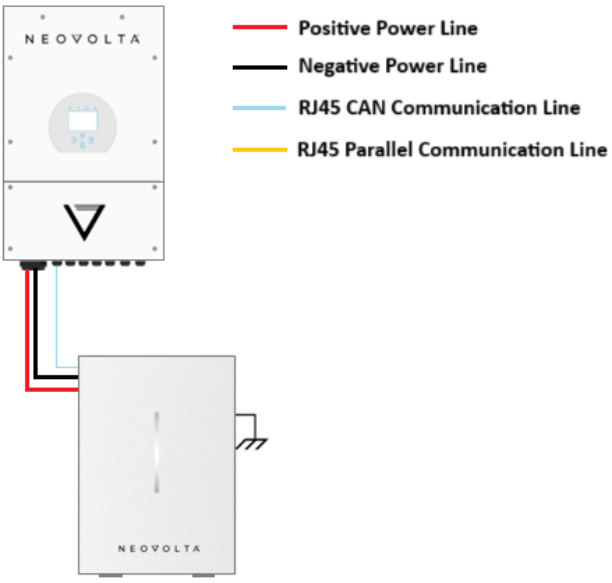
For the following configurations, the use of a common battery DC bus is required:

- (2) NV7600 inverters with (4) or (5) NVPlus-10.2 batteries
- (3) NV7600 inverters with (4) or (5) NVPlus-10.2 batteries
- (4) NV7600 inverters with (5) NVPlus-10.2 batteries

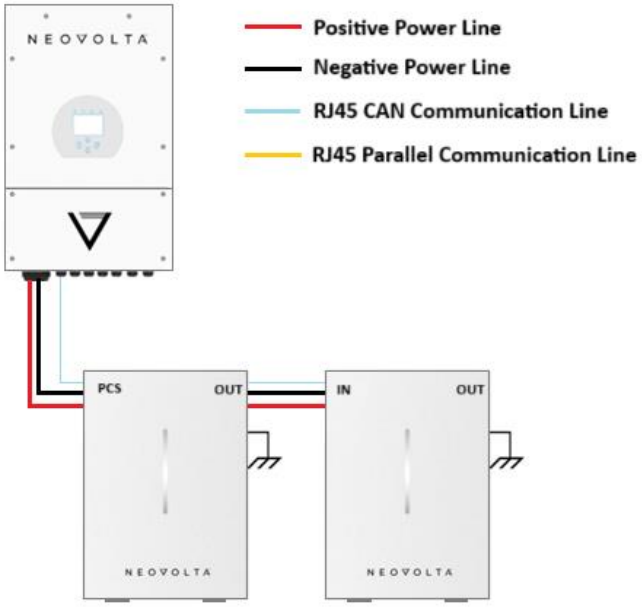
NEOVOLTA

# Technical Notes

(1) NV7600 inverter with (1) NVPlus-10.2 battery



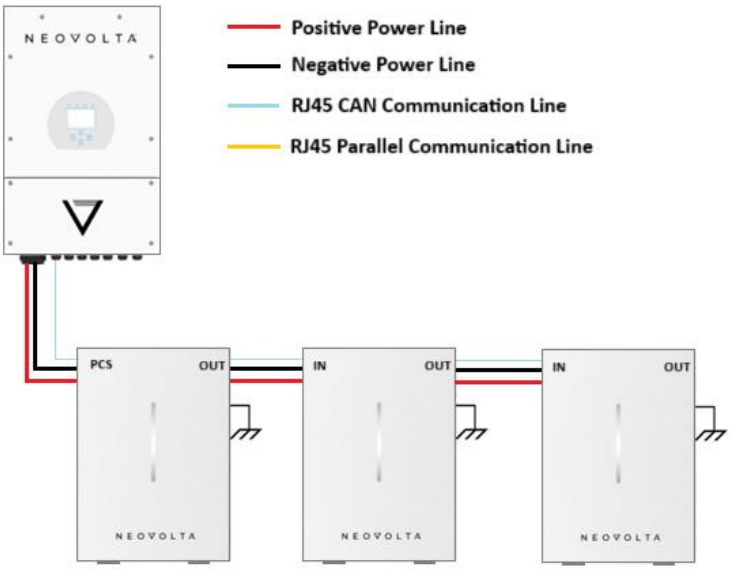

(1) NV7600 inverter with (2) NVPlus-10.2 batteries



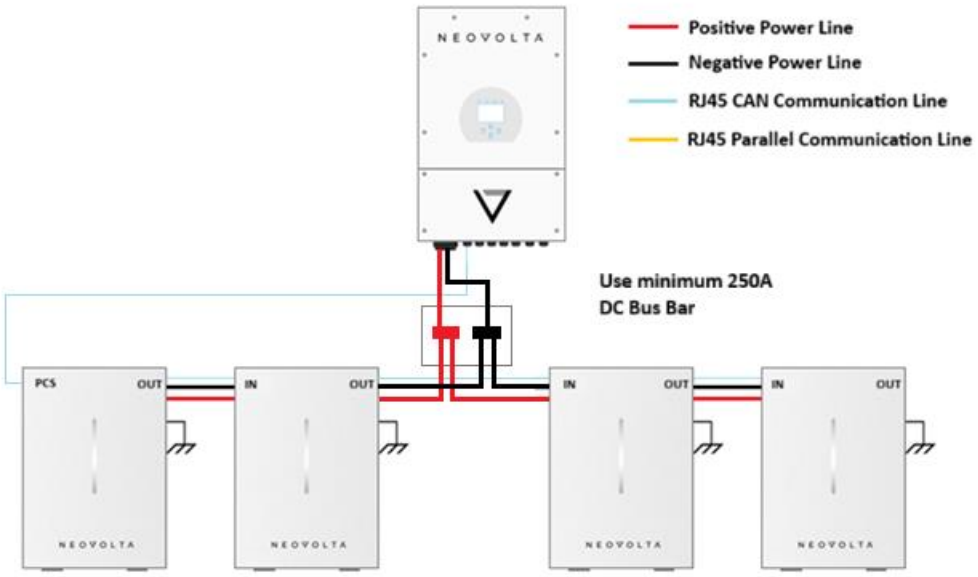
NEOVOLTA

# Technical Notes

(1) NV7600 inverter with (3) NVPlus-10.2 batteries

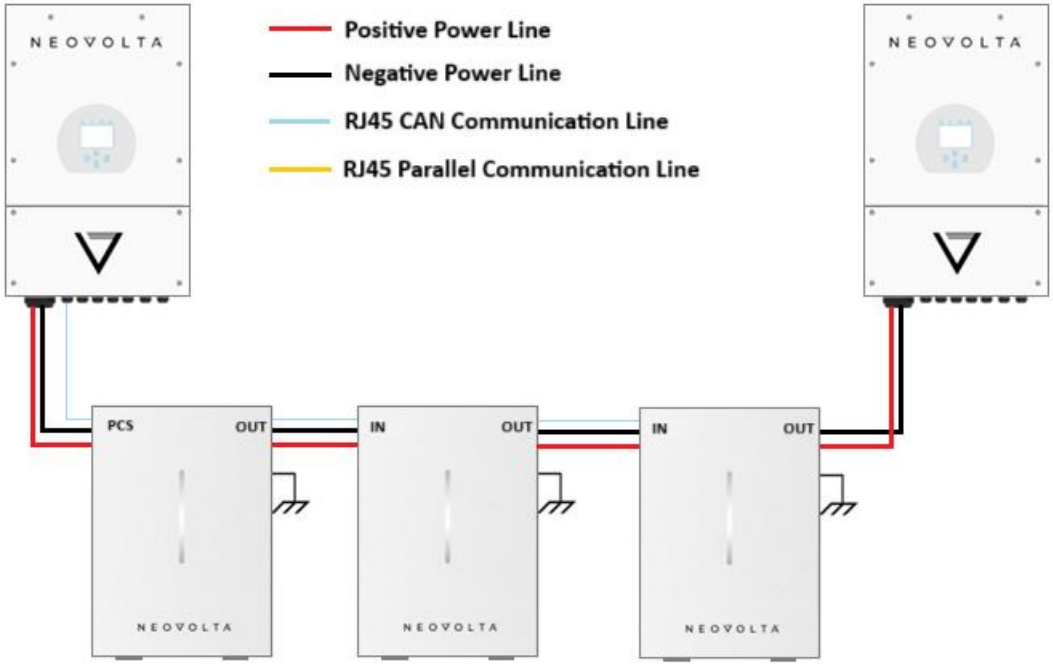



(1) NV7600 inverter with (4) NVPlus-10.2 batteries



# Technical Notes

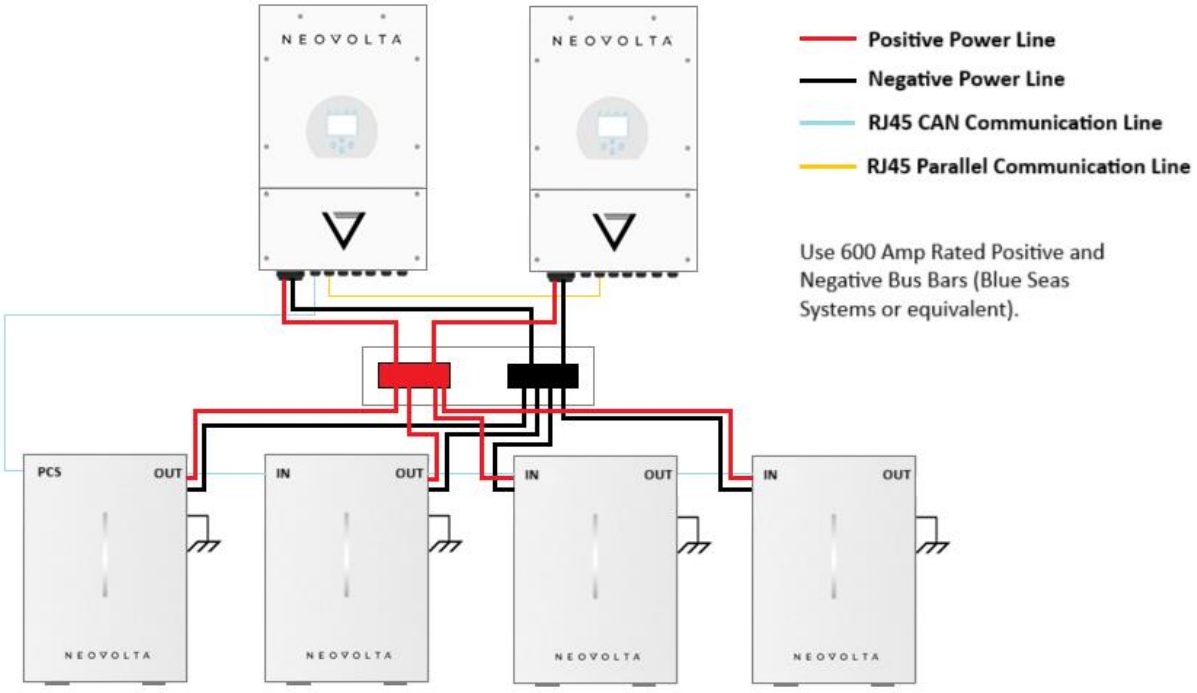
(2) NV7600 inverters with (3) NVPlus-10.2 batteries




**Note:** The Battery Management System (BMS) communication cable should be connected from the master inverter to the PCS port on the first battery.
Subsequent batteries must be interconnected via their respective IN and OUT communication ports.

# Technical Notes

(2) NV7600 inverters with (4) or (5) NVPlus-10.2 batteries

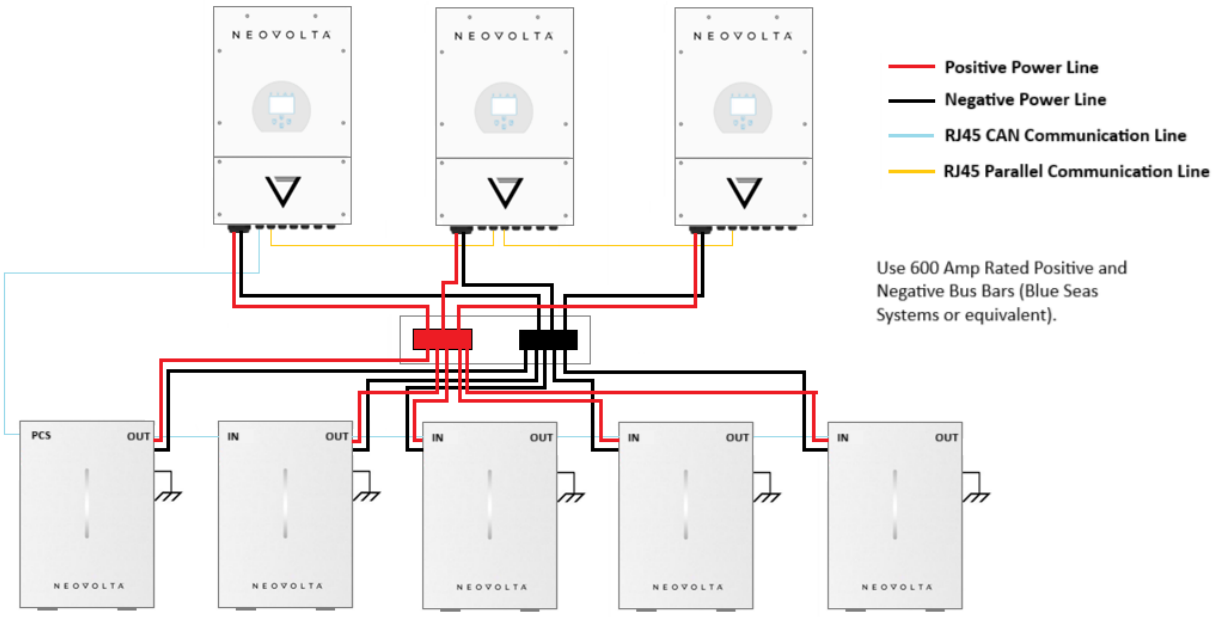



**Note:** To ensure balanced power distribution and optimal system performance, verify that all inverter-to-DC bus cables are of equal length, and likewise, all battery-to-DC bus cables are matched in length.

**Note:** The Battery Management System (BMS) communication cable should be connected from the master inverter to the PCS port on the first battery.
Subsequent batteries must be interconnected via their respective IN and OUT communication ports.
Battery terminals located on either side of each unit may be used for direct connection to the common DC bus.

# Technical Notes

- (3) NV7600 inverters with (4) or (5) NVPlus-10.2 batteries

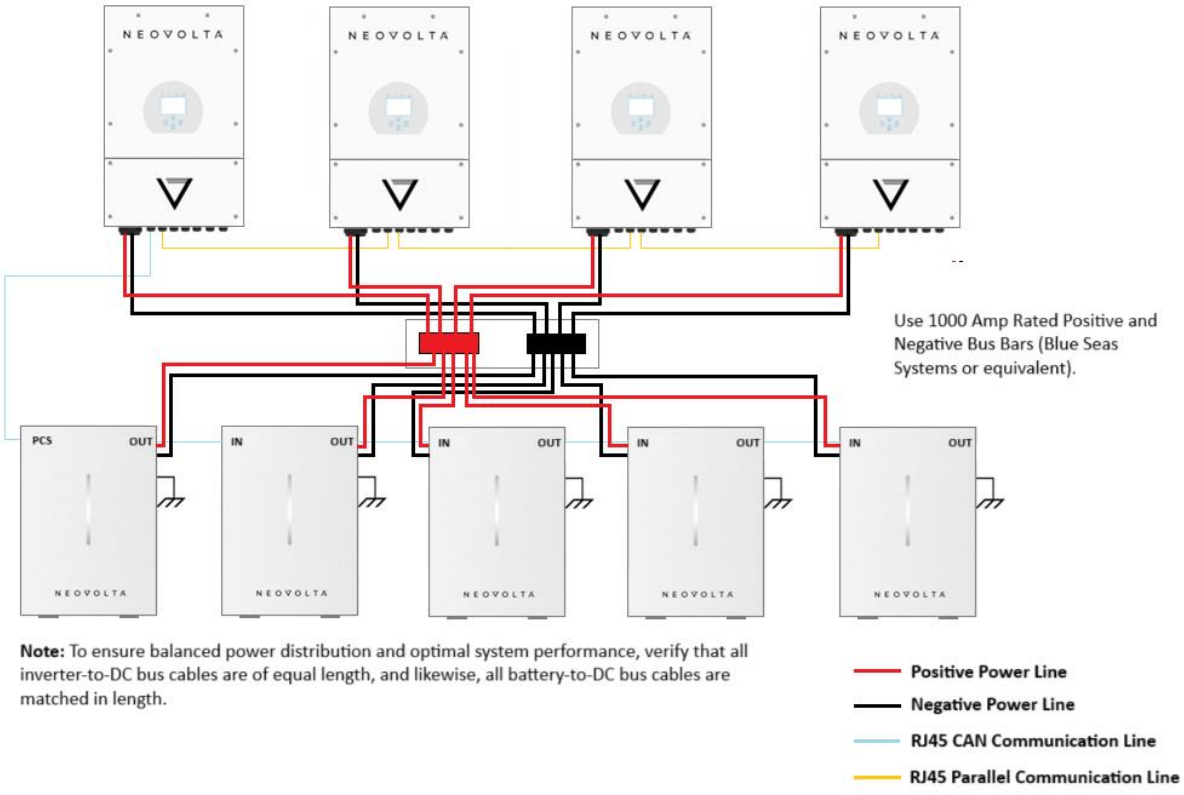



**Note:** To ensure balanced power distribution and optimal system performance, verify that all inverter-to-DC bus cables are of equal length, and likewise, all battery-to-DC bus cables are matched in length.

**Note:** The Battery Management System (BMS) communication cable should be connected from the master inverter to the PCS port on the first battery.
Subsequent batteries must be interconnected via their respective IN and OUT communication ports.
Battery terminals located on either side of each unit may be used for direct connection to the common DC bus.

# Technical Notes

- (4) NV7600 inverters with (5) NVPlus-10.2 batteries




**Note:** The Battery Management System (BMS) communication cable should be connected from the master inverter to the PCS port on the first battery.
Subsequent batteries must be interconnected via their respective IN and OUT communication ports.
Battery terminals located on either side of each unit may be used for direct connection to the common DC bus.

| Version | Revision Date | Brief Description of Change |
|---|---|---|
| V1.0 | 12/16/2025 | Document numbering updated from NV-TN-0005. Updated formatting. |