

NI 9265/9266

NI 9265: 4-Channel C Series Current Output Module

NI 9266: 8-Channel C Series Current Output Module

Physical Characteristics

Weight

NI 9265 with Screw Terminal	165 g (5.8 oz)
NI 9265 with Spring Terminal	153 g (5.4 oz)
NI 9266 with Screw Terminal	147 g (5.2 oz)
NI 9266 with DSUB	151 g (5.3 oz)

Dimensions Visit ni.com/dimensions and search by module number.

NI 9265 with Screw Terminal

Screw-terminal wiring

Gauge	0.2 mm ² to 2.5 mm ² (30 AWG to 14 AWG) copper conductor wire
Wire strip length	13 mm (0.51 in.) of insulation stripped from the end
Temperature rating	90 °C minimum
Torque for screw terminals	0.5 N · m to 0.6 N · m (4.4 lb · in. to 5.3 lb · in.)
Wires per screw terminal	One wire per screw terminal; two wires per screw terminal using a 2-wire ferrule

Connector securement

Securement type	Screw flanges provided
Torque for screw flanges	0.2 N · m (1.8 lb · in.)

NI 9265 with Spring Terminal

Spring-terminal wiring

Gauge	0.2 mm ² to 2.5 mm ² (26 AWG to 14 AWG) copper conductor wire
Wire strip length	10 mm (0.39 in.) of insulation stripped from the end
Temperature rating	90 °C minimum
Wires per spring terminal	One wire per screw terminal; two wires per screw terminal using a 2-wire ferrule

Connector securement

Securement type	Screw flanges provided
Torque for screw flanges	0.2 N · m (1.8 lb · in.)

NI 9266 with Screw Terminal

Screw-terminal wiring

Gauge	0.05 mm ² to 0.82 mm ² (30 AWG to 18 AWG) copper conductor wire
Wire strip length	5 mm to 6 mm (0.20 in. to 0.24 in.) of insulation stripped from the end
Temperature rating	90 °C minimum
Torque for screw terminals	0.20 N · m to 0.25 N · m (1.8 lb · in. to 2.2 lb · in.)
Wires per screw terminal	One wire per screw terminal; two wires per screw terminal using a 2-wire ferrule
Ferrules	0.25 mm ² to 1.0 mm ²

Connector securement

Securement type	Screw flanges provided
Torque for screw flanges	0.3 N · m to 0.4 N · m (2.7 lb · in. to 3.5 lb · in.)

Environmental

Temperature

Operating	-40 °C to 70 °C
Storage	-40 °C to 85 °C

Ingress protection	IP40
Humidity	
Operating	10% RH to 90% RH, noncondensing
Storage	5% RH to 95% RH, noncondensing
Pollution Degree	2
Maximum altitude	
NI 9265	5,000 m
NI 9266 with screw terminal	3,000 m
NI 9266 with DSUB	5,000 m

Indoor use only.

Hazardous Locations

Explosive atmospheres rating	Ex nA IIC T4 Gc
CCC certificate number	2021312310000312

Safety Guidelines

Operate the product only as described in this document.



Caution This icon denotes a caution, which advises you to consult documentation where this symbol is marked.



Caution Do not operate this product in a manner not specified in this document. Product misuse can result in a hazard. You can compromise the safety protection built into the product if the product is damaged in any way. If the product is damaged, return it to NI for repair.



Hazardous Voltage This icon denotes a warning advising you to take precautions to avoid electrical shock with the product.

Safety Guidelines for Hazardous Voltages (Screw Terminal and Spring Terminal Products)

If hazardous voltages are connected to the device, take the following precautions. A hazardous voltage is a voltage greater than 42.4 Vpk voltage or 60 VDC to earth ground.

You may connect signals which may be floating at hazardous voltages only to the products with screw terminal or spring terminal connectors. Do not connect signals which may be floating at hazardous voltages to the products with DSUB connectors.



Caution Ensure that hazardous voltage wiring is performed only by qualified personnel adhering to local electrical standards.



Caution All wiring must be insulated for the highest voltage used.



Caution Do not mix hazardous voltage circuits and human-accessible circuits on the same module.



Caution Ensure that devices and circuits connected to the module are properly insulated from human contact.



Caution (NI 9265) You must use the NI 9927 connector backshell kit with the product with spring terminal to ensure that the terminals are not accessible.



Caution (NI 9266) You must use the NI 9928 connector backshell kit with the product with spring terminal to ensure that the terminals are not accessible.

Safety Guidelines for Hazardous Locations

These products have been evaluated as Ex nA IIC T4 Gc equipment and are CCC certified. Each product is suitable for use within ambient temperatures of $-40\text{ °C} \leq T_a \leq 70\text{ °C}$ in either nonhazardous locations or Zone 2 hazardous locations. If you are using the products in Gas Group IIC hazardous locations, you must use the device in an NI chassis that has been evaluated as Ex nA IIC T4 Gc equipment.

Follow these guidelines if you are installing the product in a potentially explosive environment. Not following these guidelines may result in serious injury or death.



Caution Do not disconnect I/O-side wires or connectors unless power has been switched off or the area is known to be nonhazardous.



Caution Do not remove modules unless power has been switched off or the area is known to be nonhazardous.



Caution Substitution of components may impair suitability for Zone 2.



Caution Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value of 85 V at the supply terminals to the equipment.



Caution The system shall only be used in an area of not more than Pollution Degree 2, as defined in IEC/EN 60664-1.



Caution The system shall be mounted in a CCC-certified enclosure with a minimum ingress protection rating of at least IP54 as defined in GB3836.1.



Caution The enclosure must have a door or cover accessible only by the use of a tool.

Safety Voltages

NI 9265

Connect only voltages that are within the following limits:

Safety voltages

Channel-to-COM or Vsup-to-COM	±40 V maximum
External power supply voltage range (Vsup)	9 V DC to 36 V DC

Isolation

Channel-to-channel	None
Channel-to-earth ground, Vsup-to-earth ground, or COM-to-earth ground	
Continuous, up to 2,000 m altitude	250 V RMS, Measurement Category II
Continuous, up to 5,000 m altitude	60 V DC, Measurement Category I
Withstand, up to 2,000 m altitude	2,300 V RMS, verified by a 5 s dielectric withstand test
Withstand, up to 5,000 m altitude	1,000 V RMS, verified by a 5 s dielectric withstand test



Caution If using above 2,000 m, do not connect the product to signals or use for measurements within Measurement Categories III or IV.



Caution Do not connect the product to signals or use for measurements within Measurement Categories III or IV.

NI 9266 with Screw Terminal

Connect only voltages that are within the following limits:

AO-to-COM and Vsup-to-COM	±36 V DC maximum
External power supply voltage range (Vsup-to-COM)	9 V DC to 30 V DC

Isolation

Channel-to-channel	None
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Channel-to-earth ground, Vsup-to-earth ground, or COM-to-earth ground

Continuous	250 V RMS, Measurement Category II
Withstand up to 3,000 m	3,000 V RMS, verified by a 5 s dielectric withstand test



Caution Do not connect the product to signals or use for measurements within Measurement Categories III or IV.

NI 9266 with DSUB

Connect only voltages that are within the following limits:

AO-to-COM and Vsup-to-COM ± 36 V DC maximum

External power supply voltage range (Vsup-to-COM) 9 V DC to 30 V DC

Isolation

Channel-to-channel None

Channel-to-earth ground

Continuous	60 V DC, Measurement Category I
Withstand up to 3,000 m	1,000 V RMS, verified by a 5 s dielectric withstand test
Withstand up to 5,000 m	860 V RMS



Caution Do not connect the product to signals or use for measurements within Measurement Categories II, III, or IV.

Installing C Series Modules

Verify that power is not connected to the I/O connector(s) on the C Series module.

Removing C Series Modules

Verify that power is not connected to the I/O connector(s) on the C Series module before you remove a module from the chassis.

Safety Compliance and Hazardous Locations Standards

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

- IEC 61010-1
- IEC 60079-0: Ed 6, IEC 60079-15; Ed 4
- GB3836.1, GB3836.8



Note For safety certifications, refer to the product label or the [Product Certifications and Declarations](#) section.

Product Certifications and Declarations

To obtain product certifications and the DoC for NI products, visit ni.com/product-certifications, search by model number, and click the appropriate link.

Worldwide Support and Services

NI corporate headquarters is located at 11500 North Mopac Expressway, Austin, Texas, 78759-3504, USA.

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378414A-01 March 11, 2021