
IVN-8563

Specifications

2025-01-31



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IVN-8563 Specifications

Definitions

Warranted specifications describe the performance of a model under stated operating conditions and are covered by the model warranty.

Characteristics describe values that are relevant to the use of the model under stated operating conditions but are not covered by the model warranty.

- **Typical** specifications describe the performance met by a majority of models.
- **Typical-95** specifications describe the performance met by 95% ($\approx 2\sigma$) of models with a 95% confidence.
- **Nominal** specifications describe an attribute that is based on design, conformance testing, or supplemental testing.
- **Measured** specifications describe the measured performance of a representative model.

Specifications are **Typical** unless otherwise noted.

Conditions

Specifications are typical at 25 °C unless otherwise noted.

IVN-8563 Pinout

Refer to the following tables for descriptions of the terminal block (10BASE-T1S) and RJ45 (10/100BASE-TX) pin assignments.

Table 1. 10BASE-T1S Terminal Block Pin Assignments

Connector	Pin	Signal
	1	10BASE-T1S Positive (+)
	2	10BASE-T1S Negative (-)

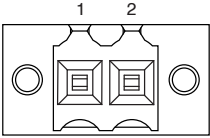
Connector	Pin	Signal
		

Table 2. 10/100BASE-TX RJ45 Pin Assignments

Connector	Pin	Signal
	1	Receive+
	2	Receive-
	3	Transmit+
	4	RCT
	5	TCT
	6	Transmit-
	7	No Connection (NC)
	8	GND

Ethernet Characteristics

Network interface	
Port 1	10BASE-T1S
Port 2	10/100BASE-TX
Communication rate	10 Mbps

Physical Characteristics

Dimensions	143.2 mm × 95.1 mm × 38 mm (5.6 in. × 3.7 in. × 1.5 in.)
Weight	426 g (15.04 oz)
I/O connectors	
Port 1	2-position terminal block; Automotive Ethernet
Port 2	RJ-45; Ethernet
Power	USB Type C
Configuration Data	USB mini-B (miniUSB)
Front-panel LEDs	
LINK	Link or firmware status, green and red
STAT	PLCA or boot status, green and red
10	Speed status, green
LINK/ACT	Link status or activity, green

Safety Guidelines



Caution Observe all instructions and cautions in the user documentation. Using the product in a manner not specified can damage the product and compromise the built-in safety protection.



Attention Suivez toutes les instructions et respectez toutes les mises en garde de la documentation d'utilisation. L'utilisation du produit de toute autre façon que celle spécifiée risque de l'endommager et de compromettre la protection de sécurité intégrée.



Caution The product is designed for nonhazardous, live signals. You must ensure that all signals connected to the product are isolated from hazardous, live circuits and no unsafe voltages are present at the inputs. Voltages that exceed the specifications could result in damage to the product or electric shock.



Attention Le produit est conçu pour les signaux en direct non dangereux. Vous devez vous assurer que tous les signaux connectés au produit sont isolés des circuits dangereux sous tension et qu'aucune tension dangereuse n'est présente aux entrées. Des tensions supérieures à celles mentionnées dans les spécifications peuvent endommager le produit ou provoquer un choc électrique.

Rated Voltages

Port 1	30 VDC, maximum
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Current Rating

Port 1	92 mA, maximum
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Note For safety certifications, refer to the product label or the Product Certifications and Declarations section.

Operating and Storage Environment



Notice Failure to follow the mounting instructions in the product documentation can cause temperature derating.



Notice This product is intended for use in indoor applications only.

Maximum Altitude	2,000 m (800 mbar)
Pollution Degree	2

Operating Environment

Temperature	0 °C to 55 °C
Relative humidity range	10% to 90%, noncondensing

Storage Environment

Temperature	-40 °C to 71 °C
Relative humidity range	5% to 95%, noncondensing

Environmental Standards

This product meets the requirements of the following environmental standards for electrical equipment.

- IEC 60068-2-1 Cold
- IEC 60068-2-2 Dry heat
- IEC 60068-2-78 Damp heat (steady state)

Power Requirements



Caution This product is rated for use only with suitably rated and certified USB Power Sources that have Class 2, Limited Energy, or LPC outputs only.



Attention Ce produit est conçu pour être utilisé uniquement avec des sources d'alimentation USB correctement évaluées et certifiées qui ont des sorties Classe 2, Limited Energy (énergie limitée) ou LPC uniquement.

Table 3. Power consumption from USB

Voltage rating	5 VDC
Maximum current rating	560 mA
Maximum power rating	2.8 W

Product Certifications and Declarations

Refer to the product Declaration of Conformity (DoC) for additional regulatory compliance information. To obtain product certifications and the DoC for NI products, visit ni.com/product-certifications, search by model number, and click the appropriate link.