
NI-9862

Specifications

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Conditions

The following specifications are typical for the range -40 °C to 70 °C unless otherwise noted.

High-Speed CAN Characteristics

Transceiver	NXP TJA1041AT
Max baud rate	1 Mbps
CAN_H, CAN_L bus lines voltage	-27 to +40 VDC
CAN Supply voltage range (V_{SUP})	+9 to +30 VDC
MTBF	Contact NI for Bellcore MTBF or MIL-HDBK-217F specifications.

Power Requirements

Power consumption from chassis	1 W maximum (active mode)
Thermal dissipation (at 70 °C)	1.25 W maximum (active mode)

Physical Characteristics

Dimensions	Visit ni.com/dimensions and search by module number.
Weight	Approximately 144 g (5.0 oz)

Safety Voltages

Connect only voltages that are within the following limits:

Maximum voltage^[1]	
Port-to-COM	-27 V DC to +40 V DC maximum, Measurement Category I
External power supply (Vsup)	+9 V DC to +30 V DC
Isolation	
Port-to-earth ground	
Continuous	60 V DC, Measurement Category I
Withstand	500 V RMS, verified by a 5 s dielectric withstand test

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, EN 61010-1
- UL 61010-1, CSA C22.2 No. 61010-1
- EN 60079-0, EN 60079-7
- IEC 60079-0, IEC 60079-7
- UL 60079-0, UL 60079-7
- CSA C22.2 No. 60079-0, CSA C22.2 No. 60079-7



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

Hazardous Locations

U.S. (UL)	Class I, Division 2, Groups A, B, C, D, T4; Class I, Zone 2, AEx nA IIC T4 Gc
Canada (C-UL)	Class I, Division 2, Groups A, B, C, D, T4; Class I, Zone 2, Ex nA IIC T4 Gc
Europe (DEMKO)	Ex nA IIC T4 Gc

Electromagnetic Compatibility

- EN 61326 (IEC 61326): Class A emissions; Industrial immunity

CE Compliance

- 2014/34/EU; Potentially Explosive Atmospheres (ATEX)

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.

Shock and Vibration

To meet these specifications, you must panel mount the system.

Operating vibration	
Random	5 g RMS, 10 Hz to 500 Hz

Sinusoidal	5 g, 10 Hz to 500 Hz
Operating shock	30 g, 11 ms half sine; 50 g, 3 ms half sine; 18 shocks at 6 orientations

Environmental

Refer to the manual for the chassis you are using for more information about meeting these specifications.

Operating temperature (IEC 60068-2-1, IEC 60068-2-2)	-40 °C to 70 °C
Storage temperature (IEC 60068-2-1, IEC 60068-2-2)	-40 °C to 85 °C
Ingress protection	IP40
Operating humidity (IEC 60068-2-30)	10% RH to 90% RH, noncondensing
Storage humidity (IEC 60068-2-30)	5% RH to 95% RH, noncondensing
Pollution Degree	2
Maximum altitude	2,000 m


Indoor use only.

Environmental Management


NI is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial to the environment and to NI customers.

For additional environmental information, refer to the **Engineering a Healthy Planet** web page at ni.com/environment. This page contains the environmental regulations and directives with which NI complies, as well as other environmental information not included in this document.

EU and UK Customers

-  **Waste Electrical and Electronic Equipment (WEEE)**—At the end of the product life cycle, all NI products must be disposed of according to local laws and regulations. For more information about how to recycle NI products in your region, visit ni.com/environment/weee.

电子信息产品污染控制管理办法（中国 RoHS）

-  **中国 RoHS**— NI 符合中国电子信息产品中限制使用某些有害物质指令(RoHS)。关于 NI 中国 RoHS 合规性信息，请登录 ni.com/environment/rohs_china。(For information about China RoHS compliance, go to ni.com/environment/rohs_china.)

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¹ The maximum voltage that can be applied or output between any port or V_{sup} terminal and a COM terminal without creating a safety hazard.