Programmable Terminal DeviceNet Interface Unit

NT-DRT21

Connect to DeviceNet Using a NT31/631-series Programmable Terminal as a Slave.

- Supports connection to three different PT (Programmable Terminal) models from the medium-sized NT31 to the large NT631 for a wider selection of display devices.
- The compact Interface Unit mounts directly to the back of the PT without taking up any unnecessary space.
- Enables both remote I/O communications and message communications.

Ordering Information

Applicable PT	Number of I/O points	Power supply voltage	Model
NT31/NT31C Series NT631 Series	64 words (8 words are used for the PT status control area and PT status notify area.)	24 VDC	**NT-DRT21**

General Specifications

Rated power supply voltage	24 VDC (Supplied from Programmable Terminal)
Allowable power supply voltage range	20.4 to 26.4 VDC (24 VDC +10%/-15%)
I/F power consumption ✻1	NT31/31C PT with Expansion Interface: 15 W max. NT631C PT with Expansion Interface: 18 W max.
Communications power supply ✻2	30 mA max.
Ambient operating temperature	0°C to 50°C
Ambient storage temperature	-20°C to 60°C
Ambient operating humidity	35% to 85 % max. (with no condensation)
Ambient operating atmosphere	No corrosive gases
Noise immunity	Conforms to IEC 61000-4-4, 2 kV (power line)
Vibration resistance (operating)	10 to 57 Hz with 0.075-mm single amplitude, 57 to 150 Hz with acceleration 9.8 m/s² for 30 minutes each in X, Y, and Z directions
Shock resistance (operating)	147 m/s² , 3 times each in X, Y, and Z directions
Dimensions	96 x 91 x 20 mm (W x H x D) (Total thickness when Interface Unit is mounted to PT: 74 mm)
Weight	350 g max.

✻1. Power is supplied from the NT31/31C/631C-series PT. The figures for power consumption given above are for both the Interface Unit and the PT combined. The power consumption for the NT-DRT21 is 1 W max.
✻2. The power consumption for DeviceNet communications is 0.75 W max. (supplied separately).

Function Specifications

Remote I/O communications	I/O area data: 64 words (This includes 5 input words and 3 output words used as the PT status communications area.)
Message communications	Reading/writing (transfer of character string memory table entries, numeral memory table entries, or bit memory table entries)
Software specifications	The following software can be used: NT-series Support Tool Version 4 Interface Unit's System Program Version 2.1 or higher

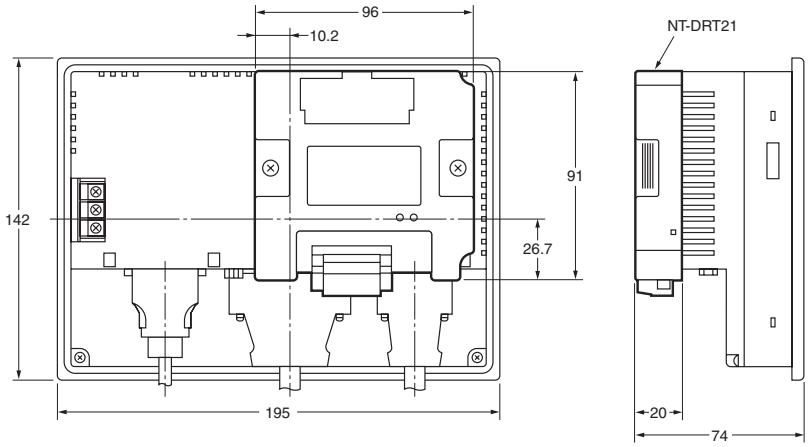
DeviceNet Communications Specifications

Communications power supply voltage	11 to 25 VDC
Maximum I/O points	64CH

Dimensions

(Unit: mm)

NT-DRT21 (Mounted to NT31/31C)



For detailed NT31/631-series PT specifications, refer to the *NT31/631-series Programmable Terminals Catalog* (V052) or *NT31/631-series Programmable Terminals Operation Manual* (V060).

Read and Understand This Catalog

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OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

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Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

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