

Facility Explorer

Network Room Modules

Description

Network Room Modules (NRMs) are electronic, wall-mountable temperature sensors designed to work directly with Facility Explorer field controllers.

All NRM models monitor room or space temperature. In addition, you can order NRMs with a backlit Liquid Crystal Display (LCD) to display the room temperature and local setpoint. Graphical display symbols can indicate fan speed selection and the need for maintenance. Optional operating controls include a dial to locally adjust the space temperature setpoint, a push button to manually override the fan speed, and a push button to select Fahrenheit (°F) and Celsius (°C) units of measure.

The NRM connects to the Remote Display link of the Facility Explorer field controller. Terminals are located in the mounting base for ease of wiring. The NRM is enclosed in an attractively styled plastic housing, which easily mounts on a wall.

Refer to the *Network Room Module Product Bulletin (LIT-12011257)* for important product application information.

Features

- attractively styled housing
- built-in platinum temperature sensor
- optional backlit LCD
- optional operating controls configurable via software
- optional °F or °C toggle button



Network Room Modules

Repair Information

If the Network Room Module fails to operate within its specifications, replace the unit. For a replacement NRM, contact the nearest Johnson Controls® representative.

Selection Charts

Network Room Modules Ordering Information (Available in Europe)

Product Code	Features/Options						
	Size (mm)	Service Port Type	LCD Display	Temperature Adjustment Dial	Fan Speed Selector Button	°F/°C Button	Addressable
LP-NRM001-000C	80 x 80	Program Key	No	No	No	No	No
LP-NRM002-000C			Yes	Yes	No	No	No
LP-NRM003-000C			Yes	Yes	Yes	No	No
LP-NRM511-000C		MUI	No	No	No	No	Yes
LP-NRM502-000C			Yes	Yes	No	No	No
LP-NRM503-000C			Yes	Yes	Yes	No	No

Network Room Modules Ordering Information (Available in North America)

Product Code	Features/Options						
	Size, mm (inch)	Service Port Type	LCD Display	Temperature Adjust Dial	Fan Speed Selector Button	°F/°C	Addressable
LP-NRM511-000C	80 x 80 mm (3.15 x 3.15 in.)	MUI	No	No	No	No	Yes
LP-NRM552-000C			Yes	Yes	No	Yes	No
LP-NRM553-000C			Yes	Yes	Yes	Yes	No
LP-NRM611-000C	120 x 80 mm (4.72 x 3.15 in.)	MUI	No	No	No	No	Yes
LP-NRM652-000C			Yes	Yes	No	Yes	No
LP-NRM653-000C			Yes	Yes	Yes	Yes	No

Network Room Modules Mounting Kits and Accessories

Ordering Code	Description
TM-1100-8931	Plastic base for surface mounting (white)
TM-9100-8941-W	Recessed wall box mounting kit (white)
TM-9100-8951-W	Panel mounting kit (white)
NS-WALLPLATE-0	Wall plate kit used to mount an 80 x 80 mm (3.15 x 3.15 in.) NRM onto a 2 x 4 in. wall box.
TM-9100-8900 (Europe) T-4000-119 (North America)	Special tool (to open module)
LP-KIT100-000C	Programming Key

Recommended FX Controller and MUI/NRM Configuration Limits (Part 1 of 2)

FX Controller Type	MUI/NRM Configuration Limits
FX06	One MUI and one NRM
FX06 Rev A	One MUI and one NRM
FX07	One MUI and one NRM
FX07 Rev A	One MUI and one NRM



Network Room Modules (Continued)

Recommended FX Controller and MUI/NRM Configuration Limits (Part 2 of 2)

FX Controller Type	MUI/NRM Configuration Limits
FX14	One MUI and two NRMs ¹
FX14 Rev A	One MUI and two NRMs ¹
FX14 Rev B	One MUI and two NRMs ¹
FX15 Universal	NRM is not supported
FX15	NRM is not supported
FX15 Rev A	NRM is not supported
FX16	NRM is not supported
FX16 Rev A	NRM is not supported
FX16 Rev B	NRM is not supported
FXVMA	One MUI and one NRM
FXVMA Rev A	One MUI and one NRM

1. One addressable NRM is required.

Technical Specifications

Network Room Modules				
Product Codes		LP-NRMxx-xxxC		
Power Supply LP NRM0xx-000C Series		14.3 to 27.6 VDC (15 to 18 VDC from connected FX controller) at 500 mW maximum, or 24 VAC ± 15%, 50/60 Hz, 1 VA maximum Class 2 or Safety Extra-Low Voltage (SELV)		
Power Supply LP NRM5xx-000C and LP NRM6xx-000C Series		9.8 to 16.5 VDC (15 VDC nominal) at 35 mA maximum Class 2 or Safety Extra-Low Voltage (SELV)		
Ambient Operating Conditions		0 to 50°C (32 to 122°F), 10 to 95% RH noncondensing (and maximum 30°C [86°F] dew point)		
Ambient Storage Conditions		-20 to 70°C (32 to 122°F), 10 to 95% RH noncondensing (and maximum 30°C [86°F] dew point)		
Dimensions (H x W x D)		80 x 80 x 35 mm (3.15 x 3.15 x 1.4 in.) or 120 x 80 x 35 mm (4.72 x 3.15 x 1.4 in.)		
Weight (with Package)		0.2 kg (7 oz.), 80 x 80 mm (3.15 x 3.15 in.) housing or 0.25 kg (9 oz.), 120 x 80 mm (4.72 x 3.15 in.) housing		
Electrical Terminations		Terminal block with screw terminals in base for 1.5 mm ² /16 AWG (maximum) wires. Recommended tightening torque 0.5 N-m.		
Temperature Sensor		Pt1000 Class A, DIN EN 60751 Range 0 to 40°C (32 to 104°F) Accuracy better than ±0.5°C (±0.9°F) with a display resolution of 0.5°C or 0.5°F Suitable for residential and commercial office environments only.		
Display LCD		Display with three digits and six symbols (not applicable for temperature sensor only models).		
Communications Interface		Connects to FX field controller Remote Display Link. Serial Bus RS-485 N2 Open Protocol at 9600 baud		
Service Port		Model LP-NRM0xx: For FX Programming Key with 9 VDC power Models LP-NRM5xx and LP-NRM6xx: For MUI with 15 VDC power		
Mounting		Direct surface mount. Plastic base for surface mount with wiring conduits, recessed wall box, and panel mounting kits available as orderable accessories.		
Housing		Material: ABS + polycarbonate, UL94-HB flammability rating Protection: IP30 (CEI/EN60529)		
Compatible FX Controllers and Firmware Versions		FX06 V 2.32 and higher	FX07 V 3.01 and higher	FX14 V 2.32 and higher
				FXVMA All versions
Agency Compliance	Europe	– 2004/108/EEC, EMC Directive: EN 61000-6-3, EN 61000-6-2		
	Canada	UL Listed (PAZX7), C22.2 No. 205, Signal Equipment Industry Canada, ICES-003		
	United States	UL Listed (PAZX), UL 916, Energy Management Equipment FCC compliant to CFR 47, Part 15, Subpart B, Class A		

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