

RF-10000 Series Electronics



RF-10000

- Remote Version of the RF-9000. For high temperature applications - 1000°F (538°C)
- For high vibration applications

Note 1: UL approved to CSA standards.

Note 2: The total length of cable can not exceed 75 feet (23m) from the electronics.

Note 3: Maximum cable distance between electronics and probe on explosion-proof is 50 feet (15.24m).

Consult factory for application approval.

Specifications and Ordering Information

Electrical Specifications

Line Voltage	120VAC \pm 15%, 240VAC \pm 15%, 50/60 Hz, 24VDC
Power	4 Watts
Output Relay	DP/DT, 5 amps at 120VAC
Temperature Range	-40°F to +160°F (-40°C to +72°C)
*Sensitivity Settings	DIP Switch Selectable 1 through 15 pF
Selectable	
Time Delay	DIP Switch Selectable 1, 2, 4, 7 seconds
Calibration	Pushbutton Electronics with Remote Capability

*Unit has a high sensitivity electronic board with .5 pF rating when choosing model "D" Electronics.

Model Selection:

Refer to Probe Selection Guide

RF10 - E - - - -

Voltage

- 1 = 120VAC
- 2 = 240VAC
- 3 = 24VDC
- 4 = 12VDC
- 5 = 24VAC
- 6 = 48VAC

Enclosure Type

- G = General Purpose NEMA 4X (See Note 2)
- X = Explosion-proof NEMA 7/9 - UL Listed/C-UL (See Note 1 and 3)
- S = NEMA 4X, 304 Stainless Steel
- E = NEMA 4X, Epoxy

Probe Requirement

- 1 = Single Probe
- 2 = Dual Probe

Electronics

- C = Standard Sensitivity With Function Test
- D = Sensitivity Modification (.5 pF) with Function Test
- K = Standard (1 pF) with Function Test and for "Type 7" Probe Only

Electronic Unit

(Probe and Cable Are Separate Items)

RF-10000 Radio Frequency Type

RF-11000 & RF-12000 Series Electronics



RF-11000 Electronics



RF-12000 Electronics with Fob

- Remote Version of the RF-9100 and RF-9200. For high temperature applications - 1000°F (538°C)
- For high vibration applications

Note 1: External calibration "fob" must be ordered as a separate part (LRF130115).

Note 2: UL approved to CSA standards.

Consult factory for details on agency listing.

Specifications and Ordering Information

Electrical Specifications

Line Voltage	120VAC \pm 15%, 240VAC \pm 15%, 50/60 Hz, 24VDC
Power	4 Watts
Output Relay	DP/DT, 5 amps at 120VAC
Temperature Range	-40°F to +160°F (-40°C to +72°C)
*Sensitivity Settings	DIP Switch Selectable 1 through 15 pF
Selectable	
Time Delay	DIP Switch Selectable 1, 2, 4, 7 seconds
Calibration	External Spring Magnet on RF-11000 or Fob Magnet on RF-12000

*Unit has a high sensitivity electronic board with .5 pF rating when choosing model "D" Electronics.

Model Selection:

Refer to Probe Selection Guide

RF1 - - E - - - -

Voltage

- 1 = 120VAC
- 2 = 240VAC
- 3 = 24VDC
- 4 = 12VDC
- 5 = 24VAC
- 6 = 48VAC

Enclosure Type

- G = General Purpose NEMA 4X
- X = Explosion-proof NEMA 7/9 - UL Listed/C-UL Listed (See Note 2)
- E = NEMA 4X, Epoxy

Probe Requirement

- 1 = Single Probe
- 2 = Dual Probe

Electronics

- C = Standard Sensitivity With Function Test
- K = Standard (1 pF) with Function Test and for "Type 7" Probe Only
- M = Calibration Indication Output Relay - Standard Sensitivity w/Function Test
- N = Calibration Indication Output Relay- .5 pF Sensitivity w/Function Test

Electronic Unit

(Probe and Cable Are Separate Items)

Type of Calibration (See Note 1)

- 1 = External Spring Calibration
- 2 = "Fob" Calibration

RF-11000/12000 Radio Frequency Type Series

RF 17000 & RF-18000 Series Electronics



RF-17000 Electronics



RF-18000 Electronics with Fob

Specifications and Ordering Information

Electrical Specifications

Line Voltage	120VAC \pm 15%, 240VAC \pm 15%, 50/60 Hz, 24VDC \pm 4VDC, 12VDC \pm 4VDC
Power	4 Watts
Output Relay	DP/DT, 5 amps at 120VAC
Temperature Range	-40°F to +160°F (-40°C to +71°C) Medium and Low Sensitivity Setting -20°F TO +125°F (-20°C to + 52°C) High Sensitivity Setting
Sensitivity Settings	2 through 9 Picofarads - "O" Electronics for RF-17000 and "C" Electronics for RF -18000
Time Delay	1, 7, 14 seconds (Selectable)
Calibration	Two-Step Manual for RF-17000 and fob activated function test on RF-18000

*Unit has a high sensitivity electronic board with .5 pF rating when choosing model "D" Electronics.

RF-17000 Series

- Best price sensor
- Manual 2-step calibration
- Single board electronics
- For high temperature applications - 1000°F (538°C)
- For high vibration applications
- Easily accessible
- Eleven optional sensing probes

RF-18000 Series

- Fob activated Function Test
- Alarm "LED" on cover

Note 1: The total length of cable is not to exceed 40 feet (12.19m) from the electronics.

Note 2: UL approved to CSA standards.

Note 3: External test and alarm "fob" must be ordered as a separate part (LPD130005).

Note 4: Maximum cable distance between electronics and probe on explosion-proof unit is 30 feet (9.14m).

Model Selection:

Refer to Probe Selection Guide

RF	-	E	-	-	-	-
						Voltage 1 = 120VAC 2 = 240VAC 3 = 24VDC 4 = 12VDC 5 = 24VAC 6 = 48VAC 7 = 100VAC
						Enclosure Type G = General Purpose NEMA 4X (See Note 1 and 2) X = Explosion-proof NEMA 7, 9 (See Note 4)
						Probe Requirement 1 = Single Probe
						Electronics C = Standard Sensitivity With Function Test (RF-18000 Only) K = Standard (2 pF) with Function Test and for "Type 7" Probe Only (RF-18000 Only) O = Standard Sensitivity (RF-17000 Only) G = Standard (2 pF) for "Type 7" Probe Only (RF-17000 Only)
						Electronic Unit (Probe and Cable Are Separate Items)

RF-17000/18000 Radio Frequency Type Series

17 = RF-17000 Radio Frequency Type Series

18 = RF-18000 Radio Frequency Type Series (See Note 3)

RF-10000, RF-11000, RF-12000, RF-17000 and RF-18000 Probe Selection

Ordering Information

Probe Selection

Refer to Probe Selection Guide

RF10 - P - - - - 1

Enclosure Material

1 = Bindicator Standard Enclosure

Enclosure Type

G = General Purpose NEMA 4X
X = Explosion-proof (See Note 7) - UL Listed/C-UL Listed (See Note 2)
S = NEMA 4X, 304 S.S.
D = Dust Ignitionproof for "J" Probe Only
E = NEMA 4X, Epoxy

Probes

0 = Standard
1 = Standard, Kynar® Coated (Max. Length 60" or 1524mm)
2 = Food Grade
3 = Ceramic (Use "D" Configuration Only)
4 = Stub
5 = Heavy Duty
6 = Heavy Duty Kynar® Coated
7 = Dome Flush mount (Config. "A" and Electronics "K" Only, Thickness to be specified) (See Note 1)
8 = Flush (Use "A" Configuration Only)
A = Armored Food Grade (Use "A" Configuration Only)
T = Teflon® Jacketed Standard Probe
U = Teflon® Jacketed Heavy Duty Probe
F = Fly Ash Probe
M = Mini Ceramic (Use "D" Configuration Only)

Configuration

A = Standard 3/4" & 1 1/4" Threaded Connector & Flush Mount (See Note 6)
B = Pipe Extended Probe - S.S. Parts (See Notes 4 and 6)
C = Pipe Extended Probe - Plated Parts (See Notes 4 and 6)
D = Lagged Probe - S. S. Connector/Plated Coupling (See Notes 5 and 6)
S = Sanitary Fitting 1" or 1 1/2" tri-clamp size (See Note 3)
H = 3/4" Hastelloy C (for Teflon® only)

Remote Probe Assembly

(Electronics & Cable Are Separate Items)

RF-Remote Radio Frequency Type

Note 1: Thickness of probe must be specified: 3/8", 1/2", 5/8", or 3/4" wall thickness.

Note 2: UL approved to CSA standards.

Note 3: For 3A Sanitary Certification, add "3A" at end of the Model Code. Configuration "S" must be used, and either "Type 2" Food Grade probe or "Type 4" Stub Probe.

Note 4: Order extensions as a separate item.

Note 5: Order lagging as a separate item.

Note 6: Order remote cable as a separate item.

Note 7: Units have been listed as complete assembly by UL for use in Class 1, Div 1 Groups C & D, Class II Div 1, Groups E, F, and G. These probes contain intrinsic safety barriers and can only be used with electronics which are designated explosion-proof, even if the electronics are in an area that is non-hazardous.

Consult factory for application approval.

Consult factory for details on agency listing.