

MODEL 375 Digital Area Monitor



Ludlum Measurements, Inc.

INDICATED USE: Area monitoring

COMPATIBLE DETECTORS: G-M, proportional, scintillation, neutron

CONNECTOR: Series "C" (others available)

DISPLAY: 4 digit LED display with 0.8" (2 cm) digits

DISPLAY UNITS: Can be made to display in $\mu\text{R/hr}$, mR/hr, R/hr, $\mu\text{Sv/h}$, mSv/h, Sv/h, $\mu\text{rem/hr}$, mrem/hr, rem/hr, cpm, cps, and others

LINEARITY: Reading within $\pm 10\%$ of true value with detector connected

RESPONSE: Typically 3 seconds from 10% - 90% of final reading

STATUS: (green light) instrument functioning properly

LOW ALARM: Indicated by yellow LOW ALARM light and slow beep (1 per second) audible tone (can be set at any point from 0.0 - 9999)

HIGH ALARM: Indicated by red HIGH ALARM light and fast beep (4 per second) audible tone (can be set at any point from 0.0 - 9999)

NOTE: Audible alert and alarm indicators can be configured as a single beep if desired

DET FAIL: (red light and audible tone; greater than 68 dB at 2 feet) indicates detector overload, no count from detector, or instrument failure

LOW BAT: (yellow) indicates less than 2 hours of battery power remaining

HIGH VOLTAGE: Adjustable from 200 - 2500 volts

THRESHOLD: Adjustable from 2 - 100 mV

DEAD TIME: Adjustable to compensate for dead time of detector and electronics (can be read on display)

OVERLOAD: Senses detector saturation (indicated by display reading "-OL-")

OVERRANGE: Indicates radiation field being measured has exceeded counting range of instrument (indicated by display reading "—")

DATA OUTPUT: 9 pin connector providing 5 decade logarithmic output, RS-232 output, signal ground connection, FAIL and ALARM signals (current sink), and direct connection to battery and ground

REMOTE (optional): Model 271, or 272 Remote units

CALIBRATION CONTROLS: Accessible from front of instrument (protective cover provided)

POWER: 95 - 135 VAC (178 - 240 VAC available), 50-60 Hz single phase (less than 100 mA), 6 volt sealed lead-acid rechargeable battery (built in)

BATTERY LIFE: Typically 48 hours in non-alarm condition; 12 hours in alarm condition

BATTERY CHARGER: Battery is continuously trickle charged when instrument is connected to line power and turned on

CONSTRUCTION: Aluminum housing with ivory polyurethane enamel paint

TEMPERATURE RANGE: 5°F(-15°C) to 122°F(50°C)

May be certified to operate from -40°F(-40°C) to 150°F(65°C)

SIZE: 7.4" (18.7 cm)H X 9.7" (24.6 cm)W X 2.5" (6.4 cm)D

WEIGHT: 6.5 lbs (2.3kg)



Part Number: 48-2230

COMMON CONFIGURATIONS

Model 375/2	0.1 - 1000 mR/hr
Model 375/4	1 - 4000 mR/hr

MODEL 271 Remote

INDICATED USE: Remote display for Model 375 Area Monitor

STATUS: (green LED) instrument functioning properly

HIGH ALARM: (red LED) indicates radiation level exceeds high alarm point

DET FAIL: (red LED) indicates detector overload, no count from detector, or instrument failure

NOTE: The Model 272 Remote display also includes an analog meter display

AUDIO: Unimorph type speaker with enable/disable switch (greater than 68 dB at 2 feet)

POWER: Provided by Model 375 (20 foot cable provided)

CONSTRUCTION: Aluminum housing with ivory polyurethane enamel paint

TEMPERATURE RANGE: 5°F(-15°C) to 122°F(50°C)
May be certified to operate from -40°F(-40°C) to 150°F(65°C)

SIZE: 7" (17.8 cm)H X 6" (15.2 cm)W X 2" (5.1 cm)D



MODEL 272 Remote

INDICATED USE: Remote display for Model 375 Area Monitor

OK: (green LED) instrument functioning properly

ALARM: (red LED) indicates radiation level exceeds high alarm point

FAIL: (red LED) indicates detector overload, no count from detector, or instrument failure

AUDIO: Unimorph type speaker with enable/disable switch (greater than 68 dB at 2 feet)

RELAY: A toggle switch to enable or disable remote relay.

METER DIAL: 0.1 - 10k mR/hr logarithmic scale (Others available depending on M375 display)

METER: 2.5" (6.4 cm) arc 1 mA analog type

POWER: Provided by Model 375 (20 foot cable provided)

CONSTRUCTION: Aluminum housing with ivory polyurethane enamel paint

TEMPERATURE RANGE: -4°F(-20°C) to 122°F(50°C)
May be certified to operate from -40°F(-40°C) to 150°F(65°C)

SIZE: 9" (22.9 cm)H X 5" (12.7 cm)W X 4.3" (10.9 cm)D

WEIGHT: 2 lbs (0.9kg)



MODEL 375 Options

The following is a list of some of the Model 375 options available:

- 4396-072 Time/Date Stamp Firmware and Printer
- 4396-068 Fiberglass box for Model 375
- 4396-142 120VHorn + Relay + Cable
- 4396-246 220VHorn + Relay + Cable
- 4396-171 120V Strobe + Relay (W/3PIN) + Cable50'
- 4396-173 220V Strobe + Relay (W/3PIN) + Cable50'
- 4396-167 M375 Logging Software and Cable
- 4396-201 M375 FORMC RELAY+3PIN
- 4396-202 M375 MAINS RELAY+3PIN
- 4396-224 M375 FORMC+FAILSAFE+3PIN
- 4396-258 4-20mA Modification Kit
- 4396-267 Horn + Strobe + Relay + Cable 120V kit
- 4396-587 Horn + Strobe + Relay + Cable 220V kit
- 4396-463 Triple Relay Kit (9 pin D)
- 4396-501 Dual Relay-2 connector modification
- 4396-579 Ethernet Kit Modification