



MODEL NL AIR FLOW STATIONS

Flow Measurement Technologies Inc.

Proven Technology Since 1985

NL 1108

Flow Measurement Technologies Inc. offers the Model NL electronic airflow measurement station for use in HVAC ductwork. The Model NL is factory assembled and wired, ready to be inserted into the ductwork. The installer must wire from strut to strut, provide 24VDC power and then connect it to the control system and the flow station is ready to operate.

We now supply all of our air flow measuring stations with the True Linear Averaging (TLA) system. Each individual flow sensor signal is linearized through the use of high speed digital circuitry and then equally weighted and averaged with all other sensors in the flow station. The result is a true average of the velocity profile of the duct.

Making this possible is the unique FMT thermal flow sensor. Unlike some others in the flow measurement industry, all FMT sensors are flow matched which has 2 distinct advantages:

1. *Since all sensors within a flow station are identical, linearization and averaging are greatly simplified.*
2. *Matched sensors allow field replacement of a defective or damaged sensor without replacing the entire probe assembly.*

Our new TLA system can handle up to 4 struts with 8 sensors on each strut resulting in greater accuracy of the flow station.

Applications For the Model NL

- Variable Volume Monitoring
- Highly Accurate Flow Stations
- Zone Duct Control
- Outside Air Intakes
- Exhaust Air Systems
- Fan Tracking

Features

- Solid-state electronics
- Field Replaceable Sensors
- Stainless Steel Sensing Elements
- Thermal Sensing Probes
- NIST Traceable Calibration
- Factory Calibrated
- Thirty Two Sensors On Four Struts
- Each Strut Is Factory Wired
- Low Energy Consumption
- Robust Construction
- NEMA 4 Electronic Enclosure
- Installs in Minutes
- Available with Struts installed in Steel or Aluminum Casing



TECHNICAL SPECIFICATIONS

OUTPUT: LINEAR
ACCURACY: +/- 2% OF READING
REPEATABILITY: +/- 1/2%
PRESSURE DROP: LESS THEN .01" W.C. @ 5000
FPM BASED ON 1 SENSOR
PER SUARE FOOT

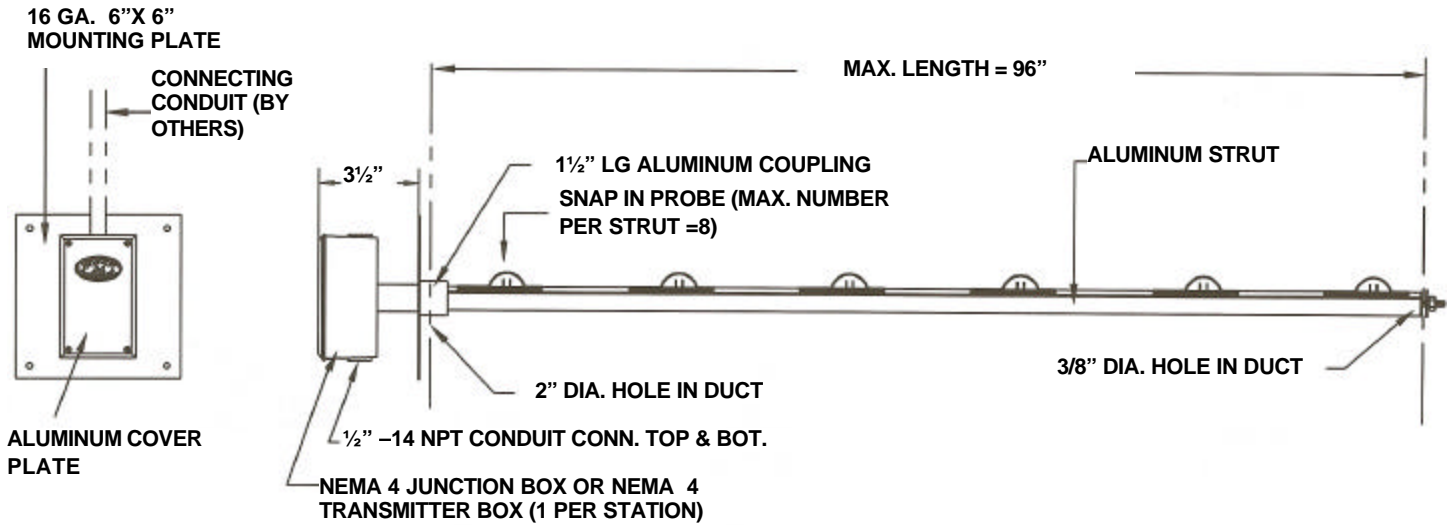
OPERATING TEMPERATURE RANGE

STANDARD: 0° to 150°F
OPTIONAL: -40° TO 120°F

OPERATING HUMIDITY RANGE: 0-99% RH
VELOCITY RANGE: 0-5000 FPM
RESPONSE TIME: 100MS

OUTPUT: 0-5vdc, 0-10vdc or 4-20Ma
INPUT POWER: 24 VDC 15 Watts Maximum
(4 Probe System)

WARRANTY: 2 YEARS, ALL PARTS

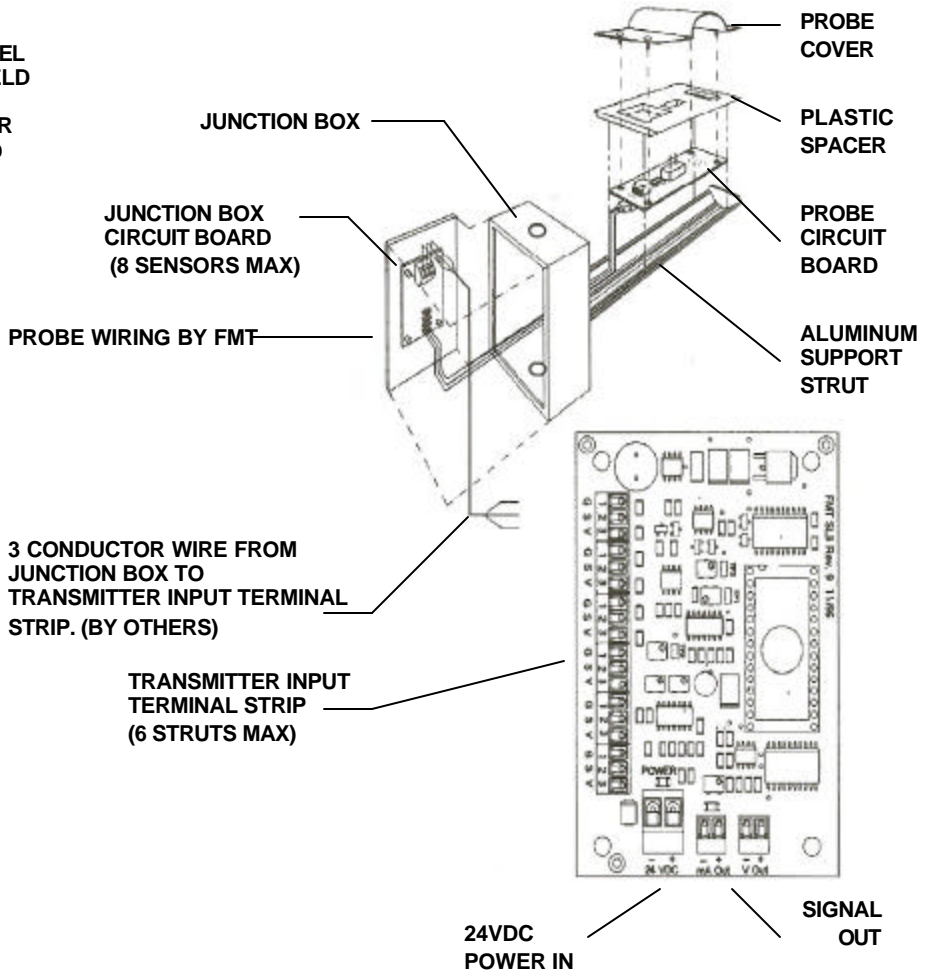


NL STRUT ASSEMBLY (MAX NUMBER PER STATION = 4)

MATERIAL SPECIFICATION

- > VELOCITY SENSOR: 304 STAINLESS STEEL
- > TEMPERATURE SENSOR: 304 STAINLESS STEEL
- > PROBES: TEMPERATURE COMPENSATED, FIELD REPLACEABLE & CLEANABLE
- > ELECTRICAL ENCLOSURE: TYPE A, WEATHER PROOF, ALUMINUM, UL & CSA LISTED
- > MOUNTING PLATE: 16 GA. GALVANIZED STEEL
- > SUPPORT STRUT: EXTRUDED ALUMINUM MILL FINISH

WIRING DIAGRAM



Transmitter With Optional Display