System Studies Incorporated

Remote Dryer Monitoring Kit

Providing a self-contained monitoring enclosure for remote air dryer cabinet installations

One of the difficulties of installing air pressure and air flow monitoring equipment at a remote air dryer location is finding room for the required components. Another consideration is making sure you have ordered or assembled all of the items necessary for the installation. Then there's the complexity of following detailed wiring schematics.

To simplify the entire process and make sure that you get the most accurate and dependable remote monitoring information possible, System Studies has assembled a Remote Dryer Monitoring Kit (Part No. 9800-4849) built around the uM260 Micro Monitor. It is comprised of a rugged plastic cabinet containing our modem version of the uM260 Micro Monitor (Part No. 9800-6260M) and our uM260 Backup Battery Kit (Part No. 9800-4848BBU).

The Backup Battery Kit includes a battery, a -48V DC power supply, a termination adapter (for the uM260-monitored transducer pairs), power supply cables, and alarm and power conductor pairs. These components not only make it possible to place the monitor in operation, they also offer emergency backup power and the ability to detect and alarm on AC power failures. (Please note that the -48V DC power supply is intended to be placed outside of the cabinet near the AC power source.)

Other kit components include an internally mounted pressure regulator, which is plumbed in line with the dryer input, and a permanently installed Flow Measurement Assembly. This assembly consists of a High Resolution Dual (pressure/flow) Transducer and a Flow Finder (with a range of your choosing). Having a pressure regulator in place on the incoming air source solves the problem of intermittent flow variations common to piston-style compressor dryers.

The Flow Measurement Assembly, Backup Battery and a conductor wire terminal strip are secured to an aluminum surface plate installed at the base of the cabinet. The uM260 Monitor and 6-pair Termination Adapter (Part No. 9010-0060) are mounted to the lid of the cabinet and electrically tied to the aluminum surface plate using a bonding strap.

All electrical components are pre-wired to the terminal strip located in the base of the cabinet. A 6-foot length of 6-pair wire is supplied for connecting the -48V DC power, the POTS (modem pair) and the dryer alarm(s). Additionally, two extra spare pairs are provided. Please note that the modem pair is supplied with an RJ-11 connector, and the -48V DC power

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supply includes a UL-certified 3-prong plug for making a connection to the AC power source at the remote dryer location. In applications where a hard-wire connection to the 115V AC power source, System Studies recommends contracting a licensed electrician to perform the work.

Ordering

The Remote Dryer Monitoring Kit (Part No. 9800-4849) is available in four Flow Finder ranges:

9800-4849W:	0-9.5 SCFH
9800-4849X:	0-19 SCFH
9800-4849Y:	0-47.5 SCFH
9800-4849Z:	0-95 SCFH

Please note that accurate flow readings can be obtained up to twice the maximum flow range specified.

Mounting Accessory

Universal Pole/Vertical Surface Mounting Kit (Part No. 6500-0010)—includes two 16 in (40.64 cm) hoseclamps, two pole mount brackets, bolts, washers and nuts.



Part No. 6500-0010

Specifications

Case/Enclosure

Dimensions: 11.25 in (28.58 cm) wide x 12.5 in (31.75 cm) tall x 7.375 in (18.73 cm) deep

Weight: 16.5 lbs (7.48 kg)

Construction: Heavy duty plastic (water resistant), rubber-fitted lid seal, metal lid faster clasps, three (3) external hinges

Power and POTS Input: one (1) snap connector for power supply, and one (1) RJ-11 connector for POTS line

Pneumatic Connections: one (1) in-port, one (1) out-port for 3/8 in (.95 cm) tubing

Exterior Ground Lug and Nut: one (1)

Mounting Component: Four (4) plastic mounting feet, screws and washers (for backing board mounting)

Accessory Mounting: Universal Pole Mounting Assembly, with pole clamps and concave case brackets (2)

uM260 Micro Monitor

Modem Version: 9600 default baud rate, RJ-11 connection

Monitoring Capacity: 4 binary devices, 16 resistive or current loop transducers, one control relay (1 amp max)

Scanning: continuous, one alarm per device

Operation: Both stand-alone and PressureMAP compatible

uM260 MICRO MONITOR

Power: requires -48V DC, maximum draw—0.2 amps, typical draws—0.033 amps

Fuse Protection: 0.1 amps

Termination Adapter

6-Pair Adapter: 3 binary (dryer alarm[s] and AC alarm pair), 3 analog (pressure and flow transducers)

Flow Measurement Assembly

TD: High Resolution (4-20mA output), pressure & flow

Flow Finder Range: 0-9.5, 0-19, 0-47.5 or 0-95 SCFH

Bracket: Stainless steel

Power Supply

Input: 100-240V AC, 50/60 Hz, 0.5 amps 3 ft (0.914 m) cord, 3-prong AC plug connector

Output: 42-50V DC, 0.42-0.36 amps 3 ft (0.914 m) cord, with plastic snap connector for pre-wired power cable connection

Backup Battery Unit

Temperature Range: 32° F (0° C)—135° F (57.2° C)

Battery Life: 2 to 2.5 hours at 70° F (21.1° C)

Enable/Disable Switch: Saves battery life during shipment or storage

BACKUP BATTERY

