
uM260 Backup Battery Kit

Overview

The System Studies uM260™ Micro Monitor (Part No. 9800-6260M) is a -48V DC-powered small-office monitor designed for a variety of monitoring applications. To make it possible to install the uM260 at remote air dryer and CEV hut locations where 115V AC is used to power equipment, System Studies provides a uM260 Backup Battery Kit (Part No. 9800-4848BBU). The primary components included in the kit are a 115V AC to -48V DC Power Supply, a backup Battery Unit, and a 6-pair uM260 Termination Adapter. These components not only make it possible to place the monitor in operation, they also offer emergency backup power and the ability to detect AC power failures.

Note: Customers who wish to purchase the above components, plus a uM260 Micro Monitor (modem version) and a flow measurement assembly installed in a rugged plastic cabinet can order a Remote Dryer Monitoring Kit (Part No. 9800-4849). Four flow ranges are available: 0-9.5, 0-19, 0-47.5 and 0-95 Standard Cubic Feet per Hour (SCFH).

The information in this document describes the functions of the individual components supplied in the uM260 Backup Battery Kit and suggests how to wire and assign device numbers for the monitored pressure, flow and contact alarm devices.

Kit Components

-48V DC Power Supply

As shown in Figure 1 the -48V DC Power Supply includes a 3-conductor cord with a UL certified 3-prong plug for making a connection to the AC power source.* It also includes a DC-out adapter cord that plugs directly into the Battery Unit. The Battery Unit is supplied with a blue, blue/white -48V DC power pair (to connect outgoing DC power to the uM260) and an orange, orange/white AC power alarm pair. These pairs, as well as both power supply cords, are six feet in length.

Battery Unit

* In applications where a hard-wire connection is required to the 115V AC power source, System Studies recommends contracting a licensed electrician to perform the work.

Battery Life

Depending upon the ambient temperature at the installation, the Battery Unit can provide approximately two to three hours of uninterrupted power to the uM260 if there is a disruption of AC power. The Battery Unit is supplied with an enable/disable switch which prevents battery discharge during shipment and storage.

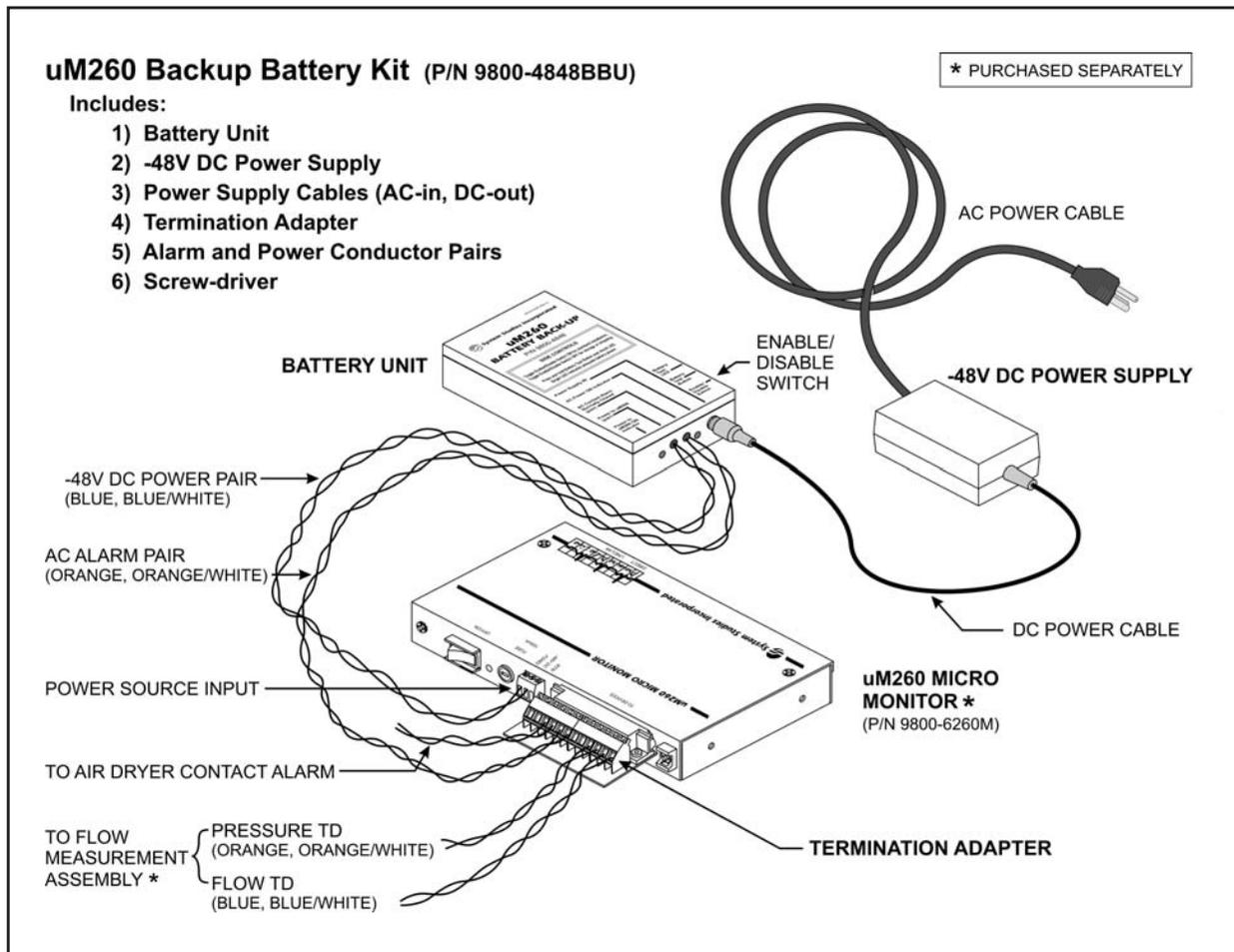


Figure 1—uM260 Backup Battery Kit Components

Termination Adapter

The kit's Termination Adapter makes it possible to connect up to three resistive or current loop transducer pairs, an air dryer contact alarm pair, the AC alarm pair, and one additional contact alarm to the uM260 monitor. In the past it was necessary to use a larger wire-wrap block and 25-pair Amphenol cable to make monitoring device pair connections to the uM260. With the uM260 Termination Adapter, monitored pairs can be connected quickly and easily using the connector's locking terminal jaws. Once the pairs are securely in place, the adapter can be inserted into the uM260's Amphenol cable receptacle. Note: A small, reversible standard/Phillips-head screwdriver is also provided to help secure the monitoring pairs to the Termination Adapter.

Pressure and Flow Monitoring

Monitored Flow Finder Assembly

For a new uM260 installation at a remote dryer cabinet or hut location, a System Studies Flow Measurement Assembly (Part Nos. 9800-3063, -3066) will need to be installed to monitor remote dryer delivery pressure and air flow rates. The Flow Measurement Assembly is equipped with a High Resolution Dual (pressure and flow) Transducer, which pneumatically connects to an on-board Flow Finder.

Termination Adapter Configuration

As shown in Figure 2, there are two groups of six locking jaw connectors on the Termination Adapter. The left side is designated for binary contact devices, and the right side is used for transducers.

Suggested Wiring

It is recommended that you insert the orange, orange/white AC power alarm pair into the two jaws labeled 1-1; the incoming dryer alarm pair should be inserted into jaws 1-2. Unless another binary device is being monitored at the remote air dryer site, the outside left pair of jaws will not be used. As stated above, the six terminal jaws on the right side of the adapter are used for the transducers. The far right pair in this group (2-1) is recommended for connecting the blue, blue/white flow transducer pair, followed by the orange, orange/white pressure transducer pair (2-2). Once again, unless a third transducer is monitored, jaws 2-3 will not be used.

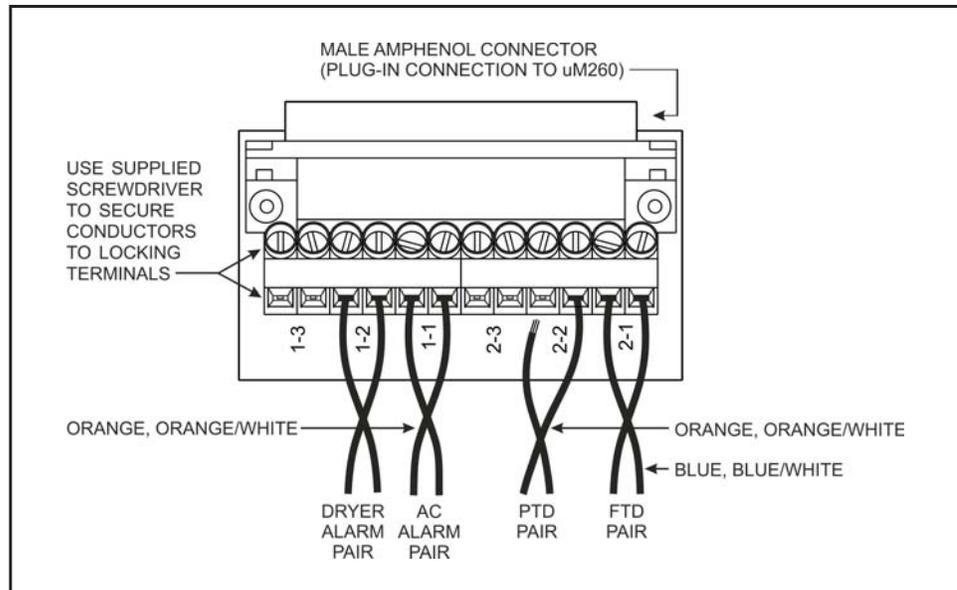


Figure 2–6-Pair Termination Adapter

Device Programming Information

*Data Entry
Recommendations*

For the type of installation described above, the uM260 will need to be programmed using the following Device Numbers, Device Types and Transducer Types shown in the table on the next page. If PressureMAP is being used to monitor the uM260, data entry can be performed directly into the PressureMAP data entry editor.

Sensor	Device Number	Device Type	Transducer Type
Flow Transducer	2-1	RF	* CF/9.5, CF/19, CF/47, or CF/95
Pressure Transducer	2-2	RP	CPA30
AC Alarm	1-1	CA or RA	CPAMS_TD
Contact Alarm	1-2	CA or RA	CPAMS_TD

* Flow range designation depends on range of Flow Measurement Assembly's Flow Finder.

Specifications

Ordering	Part No.:	9800-4848-BBU
Power Supply	Length:	3-3/4 in (9.53 cm)
	Width:	2-1/2 in (6.35 cm)
	Height:	1-1/2 in (3.81 cm)
	Input:	100-240V AC, 50/60 Hz, 0.5 A, 6 ft (1.83 m) cord, 3-prong AC plug connector
	Output:	42-50V DC, 0.42-0.36 A 6 ft (1.83 m) cord, plug-in connector specific to battery unit
	Labels:	UL, CE and TUV listed
Battery Unit	Length:	6-3/4 in (4.25 cm)
	Width:	3-1/2 in (8.89 cm)
	Height:	1-1/2 in (3.81 cm)
	Output:	-48V DC power to uM260— twisted pair, 26 gauge, orange, orange/white insulation, 6 ft (1.83 m supplied) AC Alarm—twisted pair, 26 gauge, blue, blue/white insulation, 6 ft (1.83 m)
	Temperature	
	Range:	32° F (0° C) – 135° F (57.2° C)
	Battery	
	Life:	2–3 hours at 70° F (21.1° C); 45 min. at 32° F (0° C)

Termination Adapter	Length:	3-1/4 in (8.26 cm)
	Width:	2-1/2 in (6.35 cm)
	Height:	1 in (2.54 cm)
	Connector:	male plug-in Amphenol (to uM260 monitor)
	Wiring:	6 pairs—3 transducers (resistive or mA) 3 binary devices
Kit Shipping Weight		3 lbs (1.36 kg)