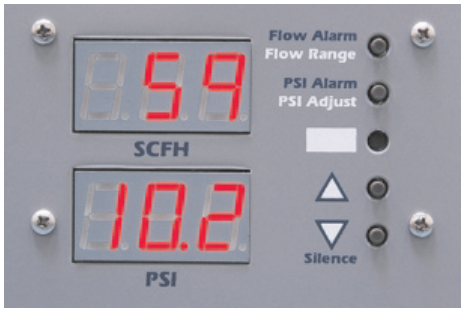
Digital Display Panels



To provide improved reading capability and expanded monitoring functionality for central office air distribution equipment, System Studies now offers an impressive line of digital display panels. These panels are equipped with pressure and flow LED displays and independent contact alarming of high flow and low delivery pressure. They also incorporate the High Resolution Pressure and Flow Transducers, precision regulators and optimized pneumatic plumbing that have become the standard of excellence for central office cable pressurization equipment.

Integral to the design and function of the new panels is the Dual Digital Panel Meter (DDPM) component. This item measures 4" x 2.5" and occupies a position on the top half of the panel face near the dual transducer. The upper 3-digit LEDs display panel air consumption from 0-950 Standard Cubic Feet per Hour (SCFH), depending upon the range of Flow Finder installed. The lower 3-digit display provides a delivery pressure reading from 0-30 pounds per square inch (PSI) in tenths (0.1) of a pound.

DDPM surface controls provide the means for establishing contact alarm setpoints, silencing alarms, changing flow range output (if installed Flow Finders are replaced with new ones of a different flow range), and calibrating pressure based on installation site altitude variations. These flush mounted push button controls, used individually and in combination, provide intuitive adjustment capability and protect against accidental disruption of set values.

DIGITAL SINGLE PIPE PANELS

9800-3783-Y-2 Panel, Digital, One Pipe, Medium Range, Dual Transducer

The Digital Single Pipe Panel is supplied with one Dual Digital Panel Meter, a 0-47.5 SCFH Flow Finder, a High Resolution Dual (pressure/flow) Transducer, a shutoff valve and a precision pressure regulator.

9800-3783-Z-2 Panel, Digital, One Pipe, High Range, Dual Transducer

This Digital Single Pipe Panel differs from the medium range one described above in that it is equipped with a 0-95 SCFH Flow Finder to accommodate higher air pipe consumption. All other components are the same.

DIGITAL DUAL PIPE PANELS

9800-3780-Y-2 Panel, Digital, Two Pipes, Medium Range, Dual Transducer

This Digital Dual Pipe Panel contains the same high quality components are the Digital Single Pipe Panel, except that it feeds two air pipes. Standard equipment includes two Dual Digital Panel Meters, two 0-47.5 SCFH Flow Finders, two High Resolution Dual Transducers, pressure regulators and shutoff valves.

9800-3780-Z-2 Panel, Digital, Two Pipe, High Range, Dual Transducer

The "Z", or high range, version of the Digital Dual Pipe Panel includes the same components as medium range panel described above with the exception of the installed Flow Finders. For this panel, two 0-95 SCFH Flow Finders are provided to accommodate higher air pipe consumption.

DIGITAL DISTRIBUTION PANELS

9800-3782-LBS-2 Panel, Digital, Distribution, Low Range, 3/8" Brass Fittings, Dual Transducer

This Digital Distribution Panel is supplied with two Flow Finder Manifolds, each containing 0-9.5 SCFH Flow Finders (for manually measuring flows to individual cables). It is also equipped with a 0-19 SCFH Flow Finder to monitor total panel air consumption. The pressure tubing connector fittings from the manifolds are nickel-plated brass, 1/4" NPT to 3/8" tubing. Pressure and flow rates are monitored remotely with a High Resolution Dual (Pressure/Flow) Transducer. One Dual Digital Panel Meter is supplied to provide visual pressure and flow readings and independent contact alarm monitoring.

9800-3782-MBS-2 Panel, Digital, Distribution, Medium Range, 3/8" Brass Fittings, Dual Transducer

This version of the Digital Distribution Panel contains all of the components of the panel described above, except that it is supplied with 0-47.5 SCFH Flow Finder to accommodate requirements for a high flow output.

9800-3782-HBS-2 Panel, Digital, Distribution, High Range, 3/8" Brass Fittings, Dual Transducer

The high range Digital Distribution Panel contains a 0-19 SCFH Flow Finder in each Flow Finder Manifold port and one 0-95 SCFH Flow Finder to measure total air consumption. All other components are the same as those described for P/N 9800-3782-LBS-2.

DIGITAL LEGACY DISTRIBUTION PANELS

To accommodate customers who prefer taking individual cable readings on panel flow raters using a Portable Flow Rater, we now offer a retro design Digital Legacy Distribution Panel. This panel incorporates "bouncing balls" with digital displays of both panel delivery pressure and total air consumption. Like the other Digital Distribution Panels described above, the Digital Legacy Distribution Panels include one DDPM component and contact alarming of low pressure and high air consumption.

9800-3682-LBS-2 Panel, Digital, Legacy Distribution, Low Range, 3/8" Brass Fittings, Dual Transducer

The low range Digital Legacy Distribution Panel is supplied with a flow rater assembly that provides ten 0-9.5 SCFH flow raters for taking individual cable flow readings. It is also equipped with a 0-19 SCFH Flow Finder and a High Resolution Dual (pressure/flow) Transducer to monitor total panel air consumption remotely. The pressure tubing connector fittings at the flow raters are nickel-plated brass, 1/4" NPT to 3/8" tubing. One Dual Digital Panel Meter is supplied to provide visual pressure and flow readings and independent contact alarm monitoring.

9800-3682-MBS-2 Panel, Digital, Legacy Distribution, Medium Range, 3/8" Brass Fittings, Dual Transducer

The medium range Digital Legacy Distribution Panel has the same capabilities and components as the low range version described above, but with a higher range Flow Finder. It is supplied with a 0-47.5 SCFH Flow Finder to meet the monitoring requirements of offices with higher flowing cables.

9800-3682-HBS-2 Panel, Digital, Legacy Distribution, High Range, 3/8" Brass Fittings, Dual Transducer

The high range Digital Legacy Distribution Panel contains a 0-95 SCFH Flow Finder to measure total air consumption. All other components are the same as those described for P/N 9782-3782-LBS-2.

All Digital Panels require a -24 vdc power supply. Please review the various options available in MISCELLANEOUS DIGITAL PANEL EQUIPMENT. If you have question, please contact System Studies or your Sales Representative.

DIGITAL POWER PIPE PANELS

9800-3799-L2 Panel, Digital, Power Pipe, Low Range, Dual Transducer

This Digital Display Panel accommodates a high capacity, one inch air pipe (Power Pipe). It is equipped with a High Resolution Dual Transducer, a 0-190 SCFH Flow Finder, pressure regulator, pipe shutoff valve and Dual Digital Panel Meter (LED display and control unit).

9800-3799-M2 Panel, Digital, Power Pipe, Medium Range, Dual Transducer

Designed for routes with higher one inch air pipe flow requirements, the"M" version of the 9800-3799 Digital Power Pipe Panel is supplied with a 0-475 SCFH Flow Finder. All other panel components are the same as the "L" version described above.

MISCELLANEOUS DIGITAL PANEL EQUIPMENT

The Digital Display Panels require a source of -24V DC power for the LED displays. Each digital display unit, which includes an LED display for both air flow (in SCFH) and delivery pressure (in PSI), is called a Dual Digital Panel Meter (DDPM). There are multiple options available for powering a DDPM: 117V AC to -24V DC power supply, 117V AC to -48V DC power supply and -48V DC CO Battery.

When standard CO battery power or the 117V AC to -48V DC power supply is used to power a DDPM, the voltage must first be reduced to approximately -24VDC. Two -48V DC to -24V DC power converter options are available for this purpose, as described below. One option is used for rack installations that include mulitple digital panels; the other pertains to a single DDPM unit.

In addition, due to the contact alarm monitoring capability of the DDPMs, and the desire of some operating companies to route contact alarms to monitor types other than the 289H LSS, System Studies also provides a rack-mountable Alarm Splitter Module.

9800-3186 Panel, Digital, Miscellaneous, Power Supply, 117V AC to -24V DC

This digital panel power supply is a rack-mounted component that converts a standard 117 volt alternating current supply to -24 volts direct current. Mounted to a standard 23" x 7" panel, the unit can be easily and optimally integrated into any digital panel equipment rack configuration. The power supply is equipped with two sets of power loads (outputs) which can be directed to separate digital panel equipment racks. Located on the back of the panel is a lighted power switch which indicates ON/OFF status.

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9800-3096 Panel, Power Supply, 117V AC to -48V DC

This power supply panel provides a convenient means of mounting a 289H LSS™ power source in an equipment rack near the 289H or 289H-M monitor. The panel, which measures 23" (58.4 cm) wide and 7" (17.8 cm) high, can be bolted to most standard equipment racks. Mounted on the back of the panel is a 289H LSS -48V DC Power Supply (Part No. 9800-6094), which uses 117V AC input to provide an output of -48V DC at 3 amps. The 9800-3096 Power Supply Panel is also used with a P/N 9800-3196 DC to DC Converter to power our Digital Pipe and Distribution Panels.

9800-3196 Panel, Digital, Miscellaneous, -48V DC to -24V DC Converter

The Digital Panels' DDPM component(s) requires a power source for the LED display. Central office battery may be used for this purpose, but only if the voltage is reduced from -48V DC to -24V DC. The 9800-3196 DC to DC Converter fulfills this requirement for up to 18 digital displays. Mounted to a 23-inch wide panel, the product consists of a front access On/Off switch, and a separate power conversion unit and conductor terminal strip located on the back of the panel. Threaded lug connectors are supplied for the incoming CO battery source and for output to each of the digital panels.

9800-3197 Panel, Digital, Miscellaneous, Digital Direct Connect Module

Digital Display Panels that are ordered separately, not as components on a factory-assembled equipment rack also require a power converter for the LED display. To fulfill this requirement for individual panel shipments, System Studies supplies a Power Direct Connect Module. This module is supplied with a mounting plate and two Molex™ connectors. The mounting plate is designed to be installed on the High Resolution Dual Transducer's wire cover, and the Molex connectors match with identical connectors spliced into the DDPM's power cable. One Digital Direct Connect Module is required for each Digital Pipe or Distribution Panel, unless multiple panels are powered by 9800-3196 DC to DC Converter.

9800-4451 Panel, Digital, Miscellaneous, Alarm Splitter Module

The Alarm Splitter Module makes it possible to split off 25 incoming Dual Digital Panel Meter contact alarm pairs so they can be monitored by both a 289H LSS and a secondary monitor, such as a Dantel. The rack mountable unit measures 23 inches wide (58.42 cm) by 1.75 inches high (4.45 cm) by 4.25 inches deep (10.79 cm). It contains 25 LEDs on the front of the panel to indicate which of the possible 25 pairs is in an alarm state.

On the back of the unit is a power connector (for -48V DC CO battery power converted to -24V DC) and three 25-pair amphenol cable connectors. One of the connectors is designated to accept incoming pairs from the connector block where the DDPMs' contact alarm pairs are wired. Two output connectors provide contact alarm cabling to the 289H and to the secondary monitor. Device pairs are mapped sequentially (e.g. pairs 1-26 in the incoming cable retain the same sequence in both of the outgoing cables).

PANEL SPECIFICATIONS

Material	Cold Rolled Steel, 12 gauge
Dimensions	Standard: 23 in (58.4 cm) x either 7 in (17.8 cm) or 3.5 in (8.9 cm).
Mounting Slots	Seven in (17.8 cm) high panels are supplied with 8 slots: 4 on each side. Top slots are 1 in (2.5 cm) apart; bottom slots are 0.5 in (1.3 cm) apart

DDPM SPECIFICATIONS

Dimensions	4 in (10.16 cm) by 2 in (5.08 cm) by 1.25 in (3.18 cm); flush mounted in panel; five rubberized tactile switch buttons
LEDs	3-digit LEDs, 0.6 in (1.52 cm) high

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