# Scanivalve

## MPS: Miniature Pressure Scanner and Accessories



Founded in 1955, Scanivalve Corp. is recognized as the world's leading supplier of Ethernet pressure and temperature measuring instruments. Scanivalve continues to provide accurate, reliable and cost effective products for many industries world wide.

## MPS4264- Ethernet Miniature Pressure Scanner

The MPS4264 is a unique 64 channel pressure scanner versatile enough to be used for many applications. It is the perfect choice where space is limited such as wind tunnel models where it is also important to keep tubing length as short as possible. Significant improvements have been made in this next generation product with regard to accuracy when used in dynamic temperature environments. This also makes the MPS an excellent choice for flight test or other demanding applications.

- 64 channels
- Integral processor for direct Ethernet connection
- Scan rates up to 2500Hz
- IEEE 1588-2008v2 PTP Compatible
- Integral web server
- Dynamic zero correction for unmatched sensor stability
- New valve design provides "isolate-purge"
- Wide operating voltage (9-36Vdc)

## ES4000- Miniature Ethernet Switch

When space is absolutely critical, the ES4000 Miniature Ethernet Switch is the perfect solution. This miniature switch allows connectivity between multiple modules from a single host. By utilizing a smaller profile connector, rather than a typical RJ45; the size of the Ethernet switch is drastically reduced. Scanivalve offers multiple cabling solutions for the ES4000. The ES4000 is available in 4 port (ES4004 PN: 20350-01) and 8 port (ES4008 PN: 20450-01, shown to the left) configurations.

- Available in 4 or 8 port options
- Single RJ-45 connection to host
- Rugged aluminum case
- Clear anodized coating
- Wide operating voltage (9-36Vdc)
- Multiple cabling options

## MPSTCU- Thermal Control Unit

The MPSTCU is intended for use in situations where thermal conditions are outside the operating range of a standard MPS module (0-70°C). The MPSTCU utilizes an internal heater circuit which provides a stable environment for the MPS, allowing it to operate at much colder temperatures. An optional Cooling Kit is available when the MPSTCU is to be used in higher temperature environments from 60-125°C. Thermal Control Units are most commonly used in flight test, wind tunnel, and engine test applications where temperatures tend to vary. See MPS4264TCU Data Sheet for more information.

- -60 to 125°C
- Single electrical and data connection at TCU
- Wide operating voltage (9-36Vdc, 20-30Vdc with heater)
- Rugged IP54 Rated aluminum enclosure

## MPS Px Input Header Kit

The MPS Px Input Header Kit allows users to quickly change tubing between model measurement. By simply replacing the input headers, the user can quickly attach 64 different pressure tubes to the module without the need to physically plumb each tube to the module. The MPS Px Input Header kit consists of two Input Headers, and six cap screws. PN: 20462-01

- Available in 0.040" and 0.031"
- Allows for quick tubing change

## MPS CAL/REF Header Kit

The MPS CAL/REF Header Kit allows users to quickly change tubing between model measurements. By simply replacing the CAL/REF header, the user can quickly attach control, CAL, and REF pressure tubes to the module without the need to physically plumb each tube to the module. The MPS CAL/REF Header kit consists of one Header, and three cap screws.
PN: 20463-01(NPx) or 20463-02 (CPx)

- Available in 0.063"
- Allows for quick tubing change
- Available for CPx and NPx modules

## MPS Plumbing Dummy

The MPS Plumbing Dummy eliminates downtime of an MPS4264 when a model shop would typically need to plumb a MPS into a model. PN: 20435-01

- Exact size dimensionally as an MPS4264 Scanner
- All mounting holes the same as an actual MPS4264 allowing for use of the mounting plate on the side or bottom
- Allows standard Px and Control headers to be installed
- O-ring seal of the Px headers allows leak tests to be performed
- Cutouts for electrical connectors
- Headers not included

## Power Cable Options

The MPS offers multiple power cable options made from extremely flexible wire. These small diameter cables (.160 inch/4.1mm O.D) are protected by a PVC jacket and have a maximum operating temperature of 105°C.

- PN: 156085-01 Premium MPS Power, Serial, and Trigger cable utilizes connectors at both ends and is intended for use between an MPS or ES4000 and the MPSPDM4500. Cable length must be specified at time of order (150 ft maximum length).
- PN: 155625-01 MPS Power/ Trigger Cable is a small diameter cable with flying leads and comes as a standard accessory with each MPS. The standard length of this cable is 3ft. This cable can be purchased separately and is intended for users who choose to supply their own power to the MPS or ES4000. (150 ft maximum length)



PN: 156085-01          PN: 155625-01

## Ethernet Cable Options

Multiple Ethernet cable options are available for the MPS. The cables labeled as "Premium" utilize the highly flexible wire. The "Premium" cables are small diameter (.160 inch/4.1mm O.D.) cables protected by a PVC jacket and have a maximum operating temperature of 105°C.

- PN:156091-01 Premium MPS Ethernet Patch Cable (MPS-ES4000) is intended for use between an MPS and an ES4000 switch. This small diameter cable complements the compact size of the MPS and ES4000 (150 ft maximum length).
- PN:156062-01 Premium MPS Ethernet Patch Cable (MPS-RJ45) is intended for use between an MPS and any standard network hub, switch, or host computer (150 ft maximum length).
- PN: 155635-xx MPS Ethernet Patch Cable (MPS-RJ45) is a standard quality patch cable intended for use between an MPS and any standard network hub, switch or host computer. Standard lengths are 10, 25 and 100 ft. (Not Pictured)
- PN: 156110-01 MPS Ethernet Extender Cable (MPS to RJ45 Female) is a standard quality cable intended to be used with an MPS and an existing patch cable. This cable comes as a standard accessory with each MPS. The standard legth of this cable is 3ft.



PN: 156091-01          PN: 156062-01



PN: 156110-01

## Power Supply - 5 Port

The five port MPS power supply allows for multiple MPS modules or the ES4000 to be powered by a single supply. This makes powering the modules convenient whether on the workbench, in the wind tunnel, or during flight test. This 5 port supply offers a single serial connection for the module plugged into the first position for advanced module configuration. PN:20030-01

- Provides power for up to 5 MPS or ES4000 modules
- 90-240 VAC/ 50-60 Hz input
- 24 Vdc output
- Serial and trigger connections on rear panel
- Rugged aluminum case
- Individual power switch for each port

**Power Supply - 5 Port**

## Power Supply

The MPSPDM4000 and MPSPDM4100 power supplies allow for a single MPS module or ES4000 to be powered. These individual power supplies are an excellent choice for users that utilize a single MPS. The MPSPDM4100 allows for a serial connection as well as external scan triggering capabilities, while the MPSPDM4000 provides power only. MPSPDM4000 PN:20046-01, MPSPDM4100 PN:20045-01

- Provides power for a single MPS or ES4000 module
- 90-240 VAC/ 50-60 Hz input
- 24 Vdc output
- Serial and trigger connections available on MPSPDM4100

**Power Supplies**

MPSPDM4100

MPSPDM4000

## MPS Blanking Cover

The MPS Blanking Cover allows for the MPS to be removed from a test section and stored in a safe location, without having to unplumb the module. Simply remove the headers and install the blanking cover over the pneumatic inputs. MPS Blanking Cover PN:20437

- Covers all pneumatic and electrical connectors when not in use
- Leaves CAL and REF input ports open to atmosphere to prevent unexpected pressurization of the sensors
- Compatible with CPx and NPx variants
- Works with the mounting plate mounted on the bottom or side

**Blanking Cover**

## MPSTCU Breakout Box

The MPSTCU Breakout Box allows users of the MPSTCU a simple means to connect Ethernet, trigger, and module/heater power to the MPSTCU. The MPSTCU Breakout Box power connector is compatible with Scanivalve PDM1500 and PDM3200 power supplies while the Ethernet connector accepts a standard RJ-45 patch cable.

- Rugged aluminum case
- Mounting strap included as a standard accessory

**MPSTCU Breakout Box**

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**visit: WWW.SCANIVALVE.COM for more information**

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