

1218C Outdoor Ethernet Switch Assembly

Installation, Operation, and Maintenance Instructions

The 1218C Outdoor Ethernet Switch Assembly is an accessory to the 1218C Electronic Tank Gauge. The Switch Assembly allows the user to network up to 5 or 8, depending on model, Ethernet enabled devices. A common application is to use the Ethernet Switch to connect several 1218C Electronic Tank Gauges to a network or wireless client device.

Specifications

Input Power

100 – 240 VAC, 50/60Hz

Operating Temperature

-40°F to 140°C (-40°C to 60°C)

Enclosure Rating

NEMA 4X

Maximum Wiring Distance

Ethernet – 330ft (CAT5e cable recommended)

Installation



WARNINGS

- **Fire Hazard** – Death or serious injury could result from spilled liquids.
- You must be trained to install or maintain this Electronic Tank Gauge. **Stop** now if you have not been trained.
- Any modification of this unit beyond what is outlined in this instruction will void product warranty.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- This device is intended to be used as an auxiliary warning to the operator of an abnormal condition of the system, such as a possible overfill situation and should not be the only system in place to prevent an unwanted condition, such as preventing a tank from overfilling. It is the sole responsibility of the operator to continuously prevent any spillage regardless of the situation.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing maintenance. Vapors could catch fire or cause an explosion. Avoid sparks, open flame, or hot tools when working on tank system.
- Use a dampened cloth when cleaning the alarm enclosure to prevent static buildup and discharge.
- In the event of malfunction, contact Morrison Bros. Co. Customer Service.



AVERTISSEMENTS

- **Risque d'incendie** – Un déversement de liquide pourrait entraîner des blessures graves ou la mort.
- Vous devez avoir reçu une formation pour installer cette jauge de réservoir électronique ou en assurer la maintenance. Arrêtez-vous immédiatement si vous n'avez reçu aucune formation à cet effet.
- Toutes les modifications apportées à cette unité autres que celles indiquées dans ces directives engendreront l'annulation de la garantie du produit.
- Pour assurer votre sécurité, il est important de vous conformer à la réglementation locale, d'État, fédérale ou OSHA régissant les travaux à l'intérieur, au-dessus ou autour du réservoir de stockage et de la zone de canalisation. Utilisez tout l'équipement de protection individuelle exigé pour travailler dans l'environnement spécifique.
- Cet appareil est destiné à être utilisé comme mécanisme avertissant l'opérateur d'un état anormal du système tel une situation de remplissage excessif et ne devrait pas être le seul système en place pour empêcher un état indésirable, par exemple, un réservoir qui se remplit trop. L'opérateur a l'entièvre responsabilité de s'assurer continuellement de prévenir tout déversement, quelle que soit la situation.
- Les réservoirs pourraient être sous pression. Des vapeurs pourraient être expulsées des conduits d'aération, des canalisations, des soupapes ou des raccords du réservoir durant la maintenance. Les vapeurs pourraient s'enflammer ou engendrer une explosion. Évitez les étincelles, les flammes nues ou les outils chauds lors de travaux menés dans le système du réservoir.
- Utilisez un linge humide pour nettoyer l'enceinte de l'alarme afin de prévenir l'accumulation d'électricité statique et les décharges.
- En cas de défaillance, communiquez avec le service à la clientèle de Morrison Bros. Co.

WARNING: This device is intended to be installed in an Ordinary Location (Unclassified Location) and be used with other Ordinary Location devices.

Mounting

The Switch Assembly is designed to be mounted outdoors, near the 1218C installations. To maintain the NEMA 4X rating of the Switch Assembly:

- Three openings have been provided in the bottom of the NEMA 4X enclosure for connection and wiring. Only use Thomas & Betts Cat. No. H050GR-TB or H050-TB or equivalent hubs in the one opening for $\frac{1}{2}$ " conduit and Thomas & Betts Cat. No. H075GR-TB or H075-TB or equivalent hubs in the two openings for $\frac{3}{4}$ " conduit.
- Any unused openings in the enclosure must be covered with a conduit hole seal.
- Mounting tabs have been provided with the product to mount the enclosure; do not make additional holes in this enclosure.
- Ensure that both cover latches are latched at all times.

Failure to follow these instructions voids any assurance that the enclosure is NEMA 4X.

Wiring

The Outdoor Ethernet Switch Assembly contains a power supply module and Ethernet switch module mounted on an assembly bracket. The modules will need to be removed from the mounting bracket to complete the required wiring. Use a Phillips head screwdriver to remove the DIN rail stop from the bracket shown in Figure 1. Use a small slot head screwdriver to pry the release tab of the power supply module. Now slide the modules off the mounting bracket.

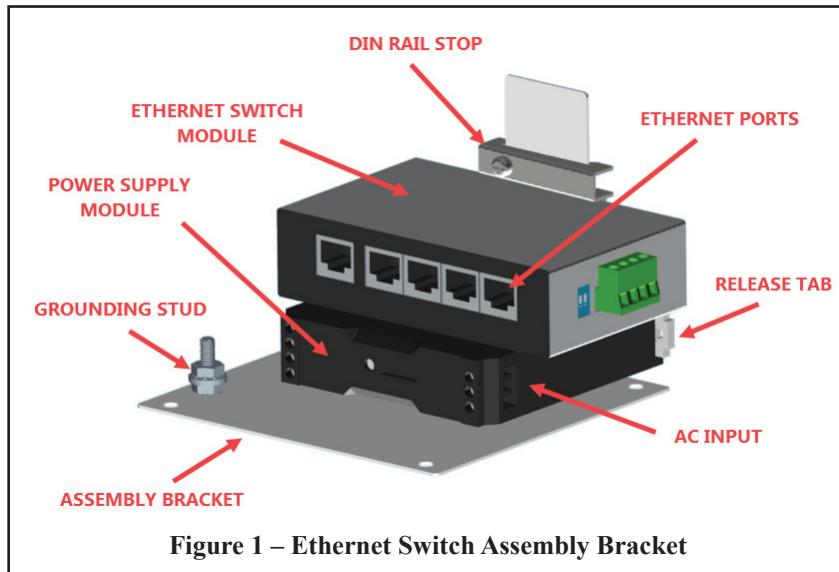


Figure 1 – Ethernet Switch Assembly Bracket

The Switch Assembly is provided with the DC power supply pre-wired to the Switch module. Therefore, the user will only need to provide the AC input and ground wiring to the assembly. The AC input power should be wired to the power supply connections labelled ‘L’, ‘N’, and Ground (symbol) in the Ethernet Switch Assembly as shown in Figure 2. The Ethernet Switch module provides a ground connection which should be connected to earth ground, see Figure 3. A grounding stud is provided to tie all ground connections together. Once all connections are made, mount the modules back on the assembly bracket and secure the modules with the DIN rail stop.



Figure 2 – AC Input Connections

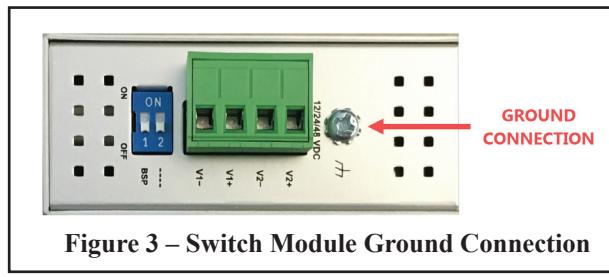


Figure 3 – Switch Module Ground Connection

The Switch Assembly provides 5 or 8 Ethernet ports, depending on the model. One of these Ethernet ports are required to connect the Switch Assembly to a network or computer, leaving the remaining ports available for other networked devices (1218C Electronic Tank Gauges, 1218C Wireless Client, 1218C External Input/Output Expansion Module, 1218C Cellular Gateway, Modbus devices, etc.). Once all connections are made and devices are all powered on, verify the connection indicators for each occupied Ethernet port are illuminated or flashing as shown in Figures 4 and 6.

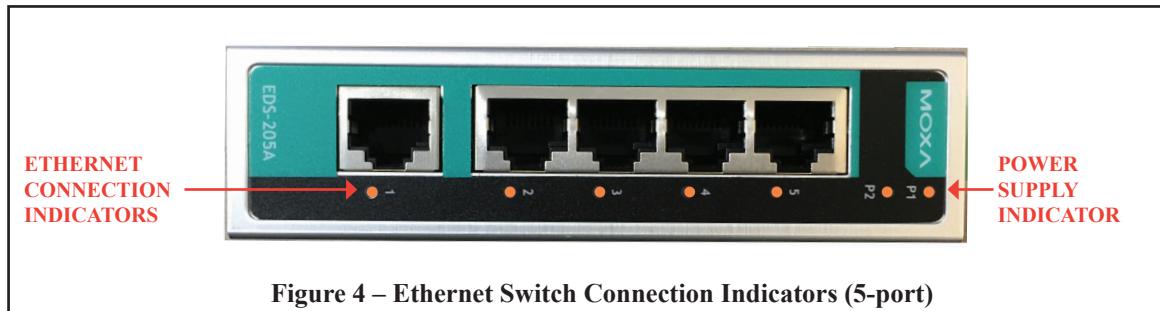


Figure 4 – Ethernet Switch Connection Indicators (5-port)

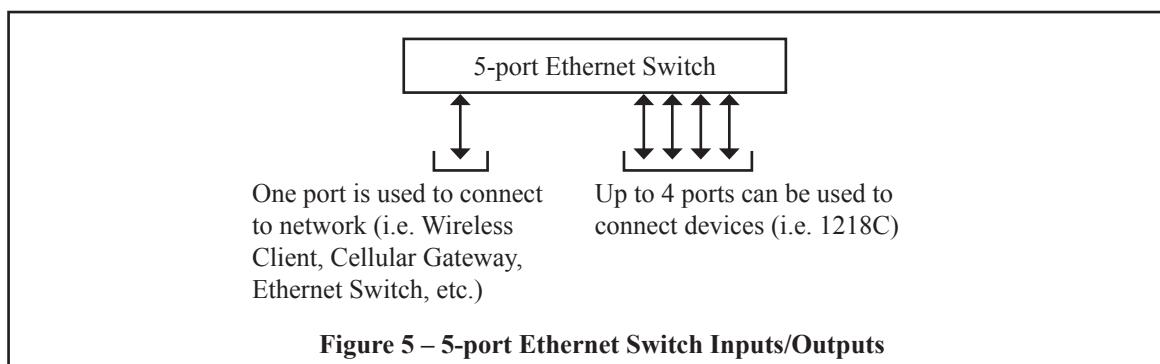


Figure 5 – 5-port Ethernet Switch Inputs/Outputs

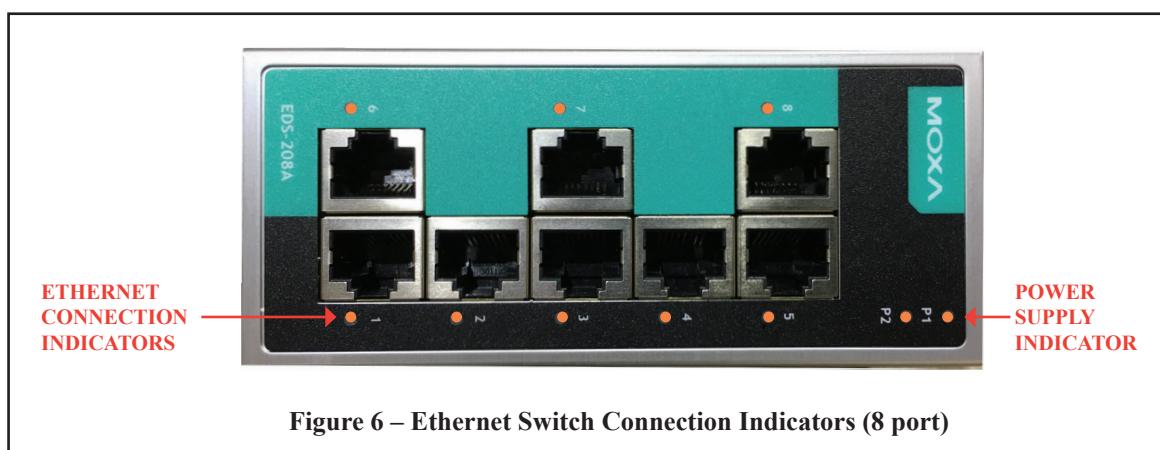


Figure 6 – Ethernet Switch Connection Indicators (8 port)

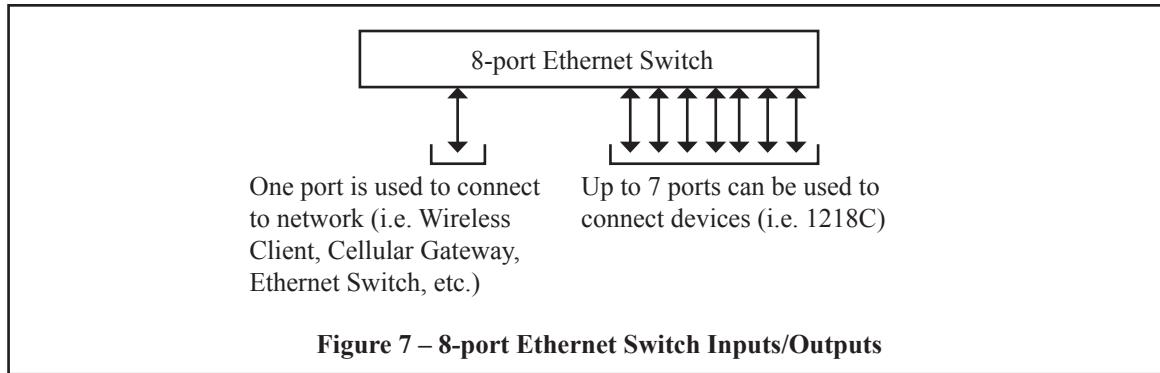


Figure 7 – 8-port Ethernet Switch Inputs/Outputs