

TS-SEM External Console Hardware Accessory INCON

The TS-SEM is a sophisticated BriteBox™ sensor expansion module that works exclusively with the Tank Sentinel® Automatic Tank Gauge and leak detection consoles. This gives the Tank Sentinel® console the ability to expand its total number of sensor inputs by increments of eight. The TS-SEM is supplied with an 18" ribbon cable used to connect it to the console. All sensor field wiring terminals are provided within the BriteBox™ and appropriately labeled to simplify installation. Not available on TS-750 and FMS Consoles.



Theory of Operation

The TS-SEM is used in situations where the internal sensor inputs, standard with all Tank Sentinel® consoles, is not sufficient to handle the amount of sensors required for the application. The TS-SEM is used to expand the number of external console sensor inputs by increments of eight. A maximum of two TS-SEMs can be connected to the Tank Sentinel® console. The sensor alarms in turn can be used to perform such tasks as to turn off submersible pumps or sound alarms.

The Tank Sentinel® console communicates with all BriteBox™ intelligent junction box expansion modules over the BriteBus™ serial interface bus. This expansion interface uses a 10 conductor ribbon cable to connect the Tank Sentinel® console to the TS-SEM BriteBox™ expansion module. The console automatically recognizes the BriteBox™ when connected and activates sensor control software features in the system. A heart beat LED is provided in the TS-SEM that indicates the TS-SEM and Tank Sentinel® console are communicating with each other.

PART NUMBER	DESCRIPTION
TS-SEM	Sensor Expansion Module
Optional Accessories	
TS-KB	Install Kit

Note:

- Up to four BriteBoxes™ can be connected to the console (two SEM's, one TS-ROM and one TS-CIM1 can be connected).
- One or two BriteBoxes™ can expand the total number of Leak Detection Sensors in the system by another eight or sixteen sensors (I.S. inputs).
- Order one TS-KB install kit for each BriteBox (includes ribbon cable, flexible conduit and fittings).

Installation

- The TS-SEM is mounted in a convenient location no further than 18" from the Tank Sentinel® console. The BriteBus™ ribbon cable is run through a three quarter inch flexible or rigid conduit to connect the console to the BriteBox™ enclosure.
- Alternatively, an optional TS-KB installation kit is recommended to simplify this connection. Sensor wiring is connected to the field wiring terminal strip in the TS-SEM. Each TS-SEM can handle up to eight INCON standard or BriteSensor™ sensors.