TRACETEK TT-TS12-E

TOUCH SCREEN SYSTEM CONTROL PANEL, CE VERSION

CE

PRODUCT OVERVIEW

The TT-TS12-E Touch Screen Panel provides a graphic user interface to manage and display information from a network of up to 250 external TraceTek leak detection circuits. The 12" full color, high resolution SVGA display is complimented with an industrial quality touch screen for user interaction and control. The TT-TS12-E collects data from a network of TraceTek Senor Interface Modules or wireless Mesh Transmitters. The status of all leak detection cables and probes is displayed in a top level summary and the current details of any selected channel are displayed at a single touch. The display features interactive and dynamic leak location maps and displays. The location of any detected leak is displayed by a flashing icon positioned over the floor plan, piping layout or the photo of a single piece of equipment at the user's discretion. Audible alarms, summary relays, serial data and web interfaces are provided as standard features.

GRAPHIC DISPLAY OF LEAK LOCATION

Every installed Sensor Interface Module (TT-SIM) or wireless mesh transmitter (TT-702) is scanned on a continuous basis. When a leak is detected, the TT-TS12 will display the leak location with the name of the reporting channel and the distance along the cable in feet or meters. The leak location information is also used to position a flashing "LEAK" icon over a user designated background image. The image can be a floor plan showing where the sensor cable has been installed, a pipe or tank plan, or the photo of a single piece of equipment. "Mapping Points" are entered during initial start-up and commissioning to provide the reference for leak location displays. Entering and editing mapping points is quick and easy. Intuitive zoom and pan gestures allow the user to quickly identify the source of any leak alarm and easily dispatch and direct a response effort.

Background images are transferred from the user's PC into the TT-TS12-E as a jpeg formatted photo or similar graphic via a USB memory stick. The TT-TS12-E can store up to 250 images (each image can have up to 100 mapping points), so that multiple branch circuits or complex cable patterns are easily captured for future leak location displays.

TT-TS12-E

FLEXIBLE INTERFACE OPTIONS

All TT-TS12-E units provide a built in Modbus RTU serial interface with user adjustable baud rates and port set-up. Modbus/TCP is supported via one of two Ethernet connectors. TraceTek publishes the complete Modbus register map and provides programming suggestions for system integrators. Since the TT-TS12-E panel uses Windows CE as an operating system, Windows based remote viewing options are built-in. It is possible to view and interact with the TT-TS12-E from a remote desktop or laptop via a LAN or web connection.

For some installations, alarm notification and response may be off-loaded to a BMS or other host system. A 'graphics and data only' TT-TS12-E panel may be appropriate. In other applications the user will require a local audible alarm and a minimum set of local relay contacts. A simple add-on module (TT-TS12-ADAM 4069) is included that adds 8 user programmable relays. By default the first three relays are dedicated to audible device control, leak detection, and trouble signals. The remaining 5 relays are user programmable and can be used to control local pumps or valves, additional horns or beacons, or provide additional digital inputs to the host system. Additional relays can be added as required. Off-the-shelf industrial I/O devices allow the system to operate hundreds of relays. It is possible to subdivide any one sensor circuit into 10 regions and assign a different relay to each of those ten regions.

ONBOARD MEMORY FOR UP TO 5000 EVENTS, SIMPLE OFF-LINE ARCHIVING AND SOFTWARE UPDATES

TT-TS12-E has a very large onboard event history stored in non-volatile memory. Events can be filtered by channel number and event type and sorted chronologically. The user can scroll up or down the event list to zero in on the desired events and time frame. All event history can be downloaded to a USB memory stick in XML format. This makes it simple to analyze the data using Excel on a PC. The complete set-up details including SIM tags, Region tags, and relay assignments and other set-up parameters can be saved to the USB stick as well.

As software updates become available, they can be obtained from your local TraceTek sales representative.

The user can transfer updated software to the TT-TS12-E with a USB memory stick and the appropriate password protected security level.

SECURE AND SAFE OPERATION

TT-TS12-E provides multi-level password protection. Simple leak display and status screens are always available for viewing. Set-up options are protected by two levels of password protection depending on the potential impact to overall system performance.

Start-up is automatic and should there be a power disruption, the system picks up where it left off including the re-flashing of any working alarms that have not been cleared or that occurred during the power outage.

AVAILABLE IN VARIOUS CONFIGURATIONS

The TT-TS12-E can be ordered as an Enclosure, available in a variety of configurations, ranging from zero SIM's up to four SIM-1 or four SIM-1A modules. All TT-TS12-E Enclosures are supplied with:

- TT-TS12 Touch Screen
- TTT-TS12-ADAM 4069
- TT-TS12-RS482/485-CNVRTR
- TT-TS12-120/230 VAC-PWR SUPPLY
- Front Panel USB Port and Buzzer

A Trim Flange is available for semi-flush mounting of the TT-TS12-E Enclosure.

Some applications may require custom mounting, so the TT-TS12-E Touch Screen Panel and associated accessories can be obtained individually.

GENERAL FEATURES

Maximum size of network - Number of leak detection circuits	250	
Precision	+/- 0.1% of circuit length	
Units	Feet, meters or zones	
Display language	English, French, German, Spanish, Italian, Japanese and Korean	
Display type / size	SVGA TFT LCD with size of 307.3 mm (12.1 in)	
Mounting	Flush or surface wall mount. Panel or rack mount.	
Environmental	Storage Temperature	−20°C to 60°C (−4°F to 140°F)
	Operating Temperature	−20°C to 60°C (−4°F to 140°F)
	Humidity	10% to 95% RH @ 40°C, non-condensing
	Ingress Protection	Front Panel: NEMA4, IP65, Enclosure NEMA1, IP10
Interfaces	Relays	Via ADAM 4069 modules in increments of 8 (up to 5 modules) Via TT-NRM in increments of 2, up to 320
	Network port	RS-485 (2 Wire) DB-9 Connector Ethernet RJ41 Connector

TT-TS12-E ENCLOSURE ORDERING INFORMATION

All Enclosures include. TT-TS12-ADAM 4069, TT-TS12-RS482/485-CONVERTER, TT-TS12-120/230 VAC-PWR SUPPLY, TT-TS12-RS232 SERIAL CABLE, TT-TS12-USB-EXTENSION, TT-TS12-BUZZER, TT-TS12-RS485 to DB9 cable, field terminal blocks and all internal wiring.

Catalog number	Part number	Description
TT-TS12-E-Panel-0	1244-015331	Enclosure mounted TT-TS12 with 0 SIMs
TT-TS12-E-Panel-S1-1	1244-015332	Enclosure mounted TT-TS12 with 1 SIM-1
TT-TS12-E-Panel-S1-2	1244-015333	Enclosure mounted TT-TS12 with 2 SIM-1
TT-TS12-E-Panel-S1-3	1244-015334	Enclosure mounted TT-TS12 with 3 SIM-1
TT-TS12-E-Panel-S1-4	1244-015335	Enclosure mounted TT-TS12 with 4 SIM-1
TT-TS12-E-Panel-S1A-1	1244-015336	Enclosure mounted TT-TS12 with 1 SIM-1A
TT-TS12-E-Panel-S1A-2	1244-015337	Enclosure mounted TT-TS12 with 2 SIM-1A
TT-TS12-E-Panel-S1A-3	1244-015338	Enclosure mounted TT-TS12 with 3 SIM-1A
TT-TS12-E-Panel-S1A-4	1244-015339	Enclosure mounted TT-TS12 with 4 SIM-1A

Enclosure weight	16.8kg (typical, with 4 SIMs installed)
Enclosure dimensions (W x H x D)	500 mm x 400 mm x 210 mm
Power requirement	85 to 264 Vac, 50/60Hz
Enclosure power consumption	40 W (typical, with 4 SIMs installed)

TT-TS12 INDIVIDUAL PARTS ORDERING INFORMATION

Catalog number	Part number	Description
TT-TS12	P000000777	Touchscreen panel
TT-TS12-ADAM 4069	P000000942	ADAM relay module
TT-TS12-RS232/485-CNVRTR	P000000949	RS232/485 converter
TT-TS12-120/230 VAC-PWR SUPPLY	P000000944	Power supply
TT-TS12-RS232 SERIAL CABLE	P000000779	RS232 serial cable
TT-TS12-USB-EXTENSION	P000000943	USB extension cable
TT-TS12-BUZZER	P000000947	Buzzer
TT-TS12-RS485 to DB9cable	P000000948	RS485 to DB9 cable

TT-TS12 weight	2.5kg
TT-TS12 dimensions (W x H x D)	311 mm x 237 mm x 54 mm
TT-TS12 panel cut-out (W x H)	302.5 mm x 228.5 mm
TT-TS12 power consumption (screen only)	30 W (typical)

APPROVALS AND CERTIFICATIONS

Advantech
TPC 1251H

c(UL)us
LISTED
E180881
I.T.F.

FCC CE

The TT-TS12 Touch Screen must be mounted in an ordinary area, but may monitor intrinsically safe TraceTek sensors located in hazardous areas.

Additional Zener Barriers are required for proper isolation between the ordinary and hazardous areas.

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