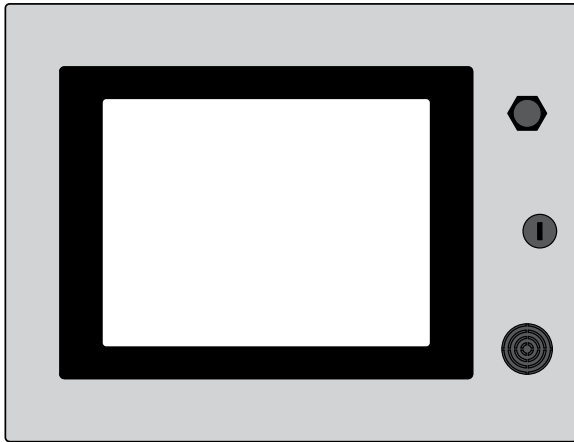


Raychem TraceTek Touchscreen System Control Panel

PRODUCT OVERVIEW



The TT-TS12B Touchscreen 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 XGA TFT LED LCD display is complimented with an industrial quality touch screen for user interaction and control. The TT-TS12B collects data from a network of TraceTek Sensor Interface Modules. 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 (TTSIM) is scanned on a continuous basis. When a leak is detected, the TT-TS12B 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-TS12B as a jpeg formatted photo or similar graphic via a USB memory stick. The TT-TS12B 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.

Flexible interface options

All TT-TS12B 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.

TT-TS12B panels include a relay module (TT-TS12-ADAM4069) that adds 8 user programmable relays. By default the first 4 relays are dedicated to audible device control, summary Leak alarm, summary Trouble alarm, and communications watchdog alarm. The remaining 4 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 (TT-TS12-ADAM4069 or TT-NRM) can be added as required, allowing the system to operate hundreds of relays. It is possible to subdivide any one TTSIM 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-TS12B 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 TTSIM tags, Region tags, 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-TS12B with a USB memory stick and the appropriate password protected security level.

Secure and safe operation

TT-TS12B 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-TS12B panel is available in a variety of configurations, ranging from zero to four TTSIM-1, TTSIM-1A, TTSIM-3 or -4 modules. All TT-TS12B panels are supplied with:

- Touchscreen PC with TT-TS12B software
- Alarm Relay Module
- Power supply (85 to 264 Vac, 50/60Hz)
- Front Panel USB Port and Buzzer
- Field terminal blocks and all internal wiring

A Trim Flange is available for semi-flush wall mounting of the TT-TS12B panel.

GENERAL FEATURES

Maximum size of network -	250	
Number of leak detection circuits		
Precision	+/- 0.1% of circuit length when using a TTSIM-1	
Units	Feet, meters or zones	
Display language	English, French, German, Spanish, Italian, Japanese and Korean	
Display type / size	XGA TFT LED LCD / 12 inch	
Mounting	Panel mount to a flat surface	
Environmental	Storage Temperature	-20°C to 60°C (-4°F to 140°F)
	Operating Temperature	-10°C to 60°C (14°F to 140°F)
	Humidity	10% to 95% RH @ 40°C, non-condensing
Interfaces	Ingress Protection	Enclosure: NEMA1, IP10; Touchscreen: IP66
	Relays	Via TT-TS12-ADAM4069 modules in increments of 8 (up to 5 modules, or 40 relays) Via TT-NRM in increments of 2 (up to 160 modules , or 320 relays)
	Network port	RS-485 (2 Wire) DB-9 Connector Ethernet RJ45 Connector

TT-TS12B PANEL ORDERING INFORMATION

Catalog number	Part number	Description
TT-TS12B-PANEL-0	2000006042	Enclosure mounted TT-TS12B with no TTSIMs
TT-TS12B-PANEL-S1-1	2000006044	Enclosure mounted TT-TS12B with 1 TTSIM-1 installed
TT-TS12B-PANEL-S1-2	2000006046	Enclosure mounted TT-TS12B with 2 TTSIM-1s installed
TT-TS12B-PANEL-S1-3	2000006047	Enclosure mounted TT-TS12B with 3 TTSIM-1s installed
TT-TS12B-PANEL-S1-4	2000006048	Enclosure mounted TT-TS12B with 4 TTSIM-1s installed
TT-TS12B-PANEL-S1A-1	2000006049	Enclosure mounted TT-TS12B with 1 TTSIM-1A installed
TT-TS12B-PANEL-S1A-2	2000006050	Enclosure mounted TT-TS12B with 2 TTSIM-1As installed
TT-TS12B-PANEL-S1A-3	2000006051	Enclosure mounted TT-TS12B with 3 TTSIM-1As installed
TT-TS12B-PANEL-S1A-4	2000006052	Enclosure mounted TT-TS12B with 4 TTSIM-1As installed
TT-TS12-TRIM-FLANGE	P000000780	Trim flange, semi-flush mount

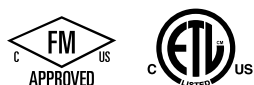
Panel weight	13.2 kg (29.0 lb) typical with 4 TTSIMs installed
Enclosure dimensions (W x H x D)	431.8 mm x 330.2 mm x 152.4 mm (17.0 in x 13.0 in x 6.0 in)
Power requirement	85 to 264 Vac, 50/60Hz
Panel power consumption	74 W max with 4 TTSIMs installed

TT-TS12B REPLACEMENT PARTS ORDERING INFORMATION

Catalog number	Part number	Description
TT-TS12B	2000006040	12" touchscreen controller / network master. Includes Tracetek software. 24 Vdc.
TT-TS12-ADAM4069	P000000942	DIN rail mount 8-channel relay module for TT-TS12 systems
UNO-PS/1AC/24VDC/90W POWER SUPPLY	T0014149	DIN rail mount 24VDC power supply (85-264 VAC input)
TT-TS12-USB-EXTENSION	P000000943	Single port, through-the-panel USB socket and cable
TT-TS12-BUZZER	P000000947	Through-the-panel buzzer compatible with TT-TS12 systems

TT-TS12B weight	5.5 kg (12.1 lb) touchscreen only
TT-TS12B dimensions (W x H x D)	311.8 mm x 238 mm x 57.1 mm (12.28 in x 9.37 in x 2.25 in)
TT-TS12B panel cut-out (W x H)	303 mm x 229 mm (11.93 in x 9.02 in)
TT-TS12B power consumption	62 W max touchscreen only

APPROVALS AND CERTIFICATIONS



The TT-TS12B panel must be mounted in an ordinary (non-hazardous) location but may monitor intrinsically safe TraceTek sensors installed in hazardous locations. Additional Zener Barriers are required for proper isolation between the ordinary (non-hazardous) and hazardous locations



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