

**testech****TESTECH ELECTRONICS PTE LTD**

PM025 Low Power DIN RAIL MOUNT SMS ALERT UNIT AND LOGGER

SPECIFICATION

Model : PM025V3(4G LTE)

Graphic LCD Display
128 x 64 pixel Backlit

Aluminum IP66 enclosure
Opt Temperature Meter Alarm
(0 - 100degC +/- 0.1degC)

GSM MODEM
Enforce LTE 4G CAT1 GSM
support SMS and IP data

Inputs and Outputs
8 Protected Dry Contact Input
2 Analog Input (0-5V/4-
20mA/0-25mA) [Std]
RS232C /485 for OEM sensors
Optional: Beacon Light LED

Power Input
External 7V-28V, Solar Panel
12V 20Watts

External Serial Interface
RS232C or RS485 for Sensor or
Meter Interfacing such as
Energy Meter, Flow
Transmitter, Gas Transmitter,
Analyzers.

RTU DIN Size Dimension:
72mmW x 88mmH x 59mmD

Aluminum IP66 Enclosure
300mmW x 450mmH x
180mmD

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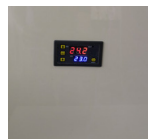
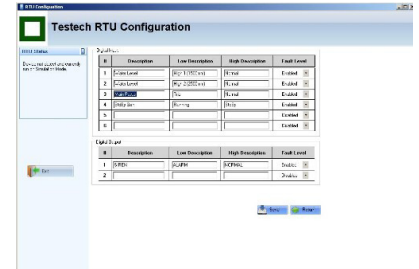
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4G LTE CAT 1 Supported

PM025 - SMS Alert and 4G Data Unit



INTRODUCTION

The PM025 is a low power embedded wireless platform design for Wireless Alert, Telemetry, and data logging applications using GSM 4G LTE or SMS Alert and Telemetry Application. LTE Frequency Band Support CAT 1 Band B1/2/3/4/5/7/8/9/12/18/19/20/28Mhz

This unit consumes low power with ability to power managed external 4-20mA Sensor, or 0-5, 0-10V. Customized protocol allows interface to energy Meter Units, Room Air Temperature, Door Open Close and Alarm unit as well as Fire Alarm Sensor. Optional Temperature Sensor allows Temperature Lo and Hi Alarm from 0—100degC +/- 0.1degC with user selectable trip point.

Optional Aluminum Powder Coated Light Weight Wall Mount or Pole Mount IP66 Enclosure with UPS Backup Battery provide up to 5 days of backup power for the RTU, includes Power Lightning Arrestor and AC Supply and Misc On/OFF Switch. PM025 can be OEM for development use.

Built in Graphic LCD

The graphic LCD (128 x 64 pixel) shows GSM Network Status, SMS Send and receive status as well as Input Status. Eliminate Laptop in the field to view status event or maintenance test. Standard display is 20 characters x 4 lines. This save cost of technician attending at site or regular test

FREE Driverless USB Interface HMI Setup

Supports native USB High Speed Interface with an embedded USB Device Stacks for HID. This is driverless and will runs on any newer PC Operating Systems that will have HID Interface including WIN10, WIN11.

LEVEL Monitoring Application

Serial Interface low power level Sensor (0—6Meters) for level sensing application. For Low power we provide RS485 digital Level Sensor. Or use std 4-20mA

Built In Battery Backed RealTime Clock/Calender.

LARGE DATALOG MEMORY

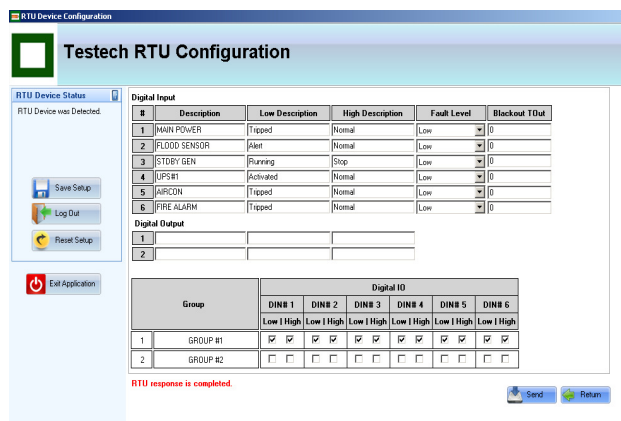
Onboard Solid State Flash Memory provides 1MBYTE of Datalog memory that is not affected by battery. Supports 16,000 points Datalog memory.

TYPICAL APPLICATION

Level Monitoring, Electrical Panel, Power Trip, Aircon trip, Alarm Inter-

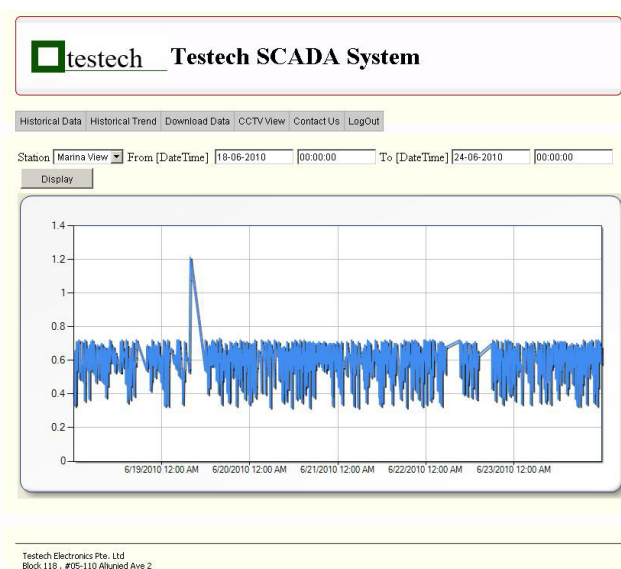
FREE WINDOWS CONFIGURATOR SOFTWARE

PM025 RTU can be easily setup via USB link to any PC running a Terminal . Login account are supported with name + password. This allows for very easy user friendly GUI base setup and Serial Terminal Emulator are no longer required. Setup can be save in the PC for duplication of RTU. Firmware update are supported for field upgrade. Datalog are downloaded at USB High Speed in CSV Format and can be imported into Excel for analysis



Adding Group and Phones

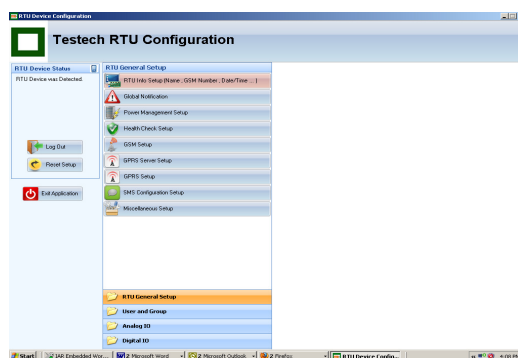
PM025 supports 2 Groups of 10 phones. The group can be setup to be users of 20 phones in total or it could be setup as as user group (10phones) or a Supervisor Group (10 phones) that allows acknowledgement and Escalation. That is if user group does not acknowledge SMS within a user set number of acknowledgement limits, the unit shall escalate the SMS to the Su-



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APPLICATIONS.

*** Water Qualities * Water Tank Level * Weather Station * Rain Gauge * Treatment Plant *Pollution *Flood Alert * Flow Meter * HVAC * Data Center * Environmental Monitoring * Power Monitoring * Radio Tower * Energy Meter.**



Easily Setup Digital and Analog IO

The Digital Setup are easily setup with IO description, Individual Alarm Message for Low level or High Level Alarm and each Digital Input can be individually enabled or disabled.

Analog Input allows for user engineering unit, Zero and Span settings as well as Low level Alarm or High Level Alarm in user set limits.

Analog input can be individually enabled or disable to generate alarm.

SMS Functionality

Each DIN (Low Event, High Event), AIN (Low Alarm, High Alarm) can be assigned individually to the 2 Groups. SMS Escalation with user define acknowledgement timeout for up to 5 Escalation Repeataion at individual defined interval are supported.

IP TCPIP Functionality.

IP Packet can be configured to send out at fixed interval (as short as 5secs) typically at 1min to 5 min interval for real time Remote Logging. Requires TSCADA Software installed on PC.

TESTECH TSCADA ON LINE Web MONITORING

Testech hosted online monitoring of level monitoring, allows Online view, download of data and export to CSV format.

Email alert for the level above sensing limit.

Typical Applications that uses PM025 for cost effective SMS Alert and logging.

Level Monitoring and Main Pressure Monitoring

PM025 accept up to 8 float switches and 2 4-20mA Analog Sensors (Hydrostatic Level sensor, Barometric Sensors or water Qualities Sensors). PM025 draw low power which means smaller battery and solar power.

Level Sensor is 0-6Meters, Digital Interface to the PM025 RS485 interface.

Logging of Event Trigger (Discrete float switch level sensors, solid state Level Sensors) as well as Regular Log of analog sensor is possible (min 1mins logging).

SMS Alarm can be send, or remote SMS query. This makes a cost effective proposal as lower cost sensor can be use to compete in projects.

Waste Water Holding Tank SMS Alert

PM025 can be AC powered or Solar Powered, This is mounting of 2 x IP68 float Switches on the waste water holding tank to send SMS Alert on Hi alarm and Critical Alarm Level for the purpose to calling Pumping Truck in Waste Water Tank

The waste Water Tank can be underground or above ground.

Optional Beacon light and Aux Power fail relay.
The backup battery can last 6 days in full Power On GSM active mode in case of power failure

Water Qualities and Weather Monitoring

Connect to Aqua Sensors (DO, PH, ORP, Ammonia etc) Water Qualities for river, fish farm, river pollution, Sensor via the 4-20mA Sensors, Log Data and send SMS Alert .

Customized service avail for digital sensors via RS485 , that eliminate the need for 4-20mA and related power consumption issue.

Rain Gauge (PM025RG) is for raintip logging (select 0.1mm, 0.2mm or 0.5mm Rain Gauges)

Nose Monitor for NEA requirement requires Class 1

Electrical Panel Monitoring

Using the digital input, connect to the Auxillary Relay to monitor Power trip, AC Generator, Air contrip, Pumping Panel or Water Tank.

The PM025 has built in LCD to ease remote check and status check without having to connect a laptop.

User can remotely SMS (authorized phone number) to check status to verify alarm.

