## TRITECH FIXED STATION - WEATHER

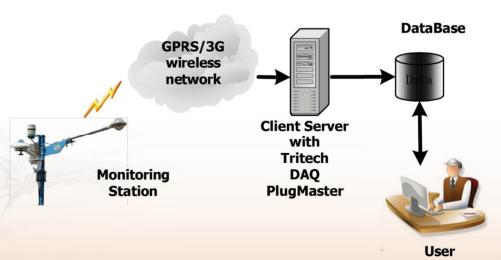


- Fully automated weather station monitoring
- Sensor with high accuracy and reliability
- Modular design concept, with wide range of parameters to choose
- Independently powered by solar with low power design
- Additional add-on video surveillance camera

Tritech real-time monitoring station is a fully automated monitoring system, which automatically measures and transmits the data over the internet via GSM/GPRS/3G network.



To check the real-time data instantly, customer just need to install Tritech DAQ plugmaster software in any server that is linked to internet. Upon receiving the data, the software checks for error, verifies its validity, before proceeding to write into SQL database that is installed in the customer's server.



Customer can access the data any time in any of the electronic device, by connecting to the SQL database directly via standard SQL query. Data viewable includes real-time value of any parameter, system operating status like system voltage, data logger's health and etc. This great feature enables the customer to have in-time and in-depth information about the far-away monitoring station, without having the hassle to go down and download the data manually.

Technical specification for standard parameters				
Parameter	Measuring Principle	Range	Accuracy	Resolution
Rain	Tipping Bucket	400mm/hr	±2% (50mm/hr)	0.2mm
Wind Speed	2D Ultrasonic	0-60m/s	±3%	0.1m/s
Wind Direction	2D Ultrasonic	360°	±3°	1°
Atmospheric Pressure	Ceramic Capacitor	0-1200hPa	±1.5hPA	±1.5hPA
Temperature	Thermistor	-40°C~100°C	±0.4°C	±0.4°C
Humidity	Capacitive Sensor	0-100%RH	±2%RH	±2%RH
Total Solar Radiation	Filter Radiometer	2000W/m <sup>2</sup>	±2W/m2	1W/m2
Total UV	Filter Radiometer	75W/m <sup>2</sup>	±1W/m2	0.08W/m2

Technical specification for video parameters				
Minimum Illumination	0 Lux			
Resolution	PA: 752(H) X 582(V)			

Structure Parameters				
Dimension	150mm (depth) *350mm (length) *1500mm (height)			
Material	Stainless Steel			
Weight	70 kg			

System Parameters				
Power Source	Solar Power 100W			
System Operating	14 days of continuous operation without sunlight			
Operating Temperature	4°C ~ 40°C			
System Safety	Real-time anti-theft alert			
Communication	Wireless GSM/GPRS/3G network			
Data format	HJ/212-2005, GB/T16706-1996			

## **Project Profile**

Project Name	A data acquisition system inclusive of weather station for Budget Terminal PV System - SPO000EPO09001708	
Project Description	1 Fix Station of Weather and Solar PV Data Acquisition System	
Customer	Singapore Polytechnic	
Contract Period	2009-09-08 - 2010-09-15	





