Project Title: AAWS - Auxiliary Automated Weather Station
Year:2015
Location:Malaysia

AAWS is a project consisting of 60 AWS installed in Malaysia. Its primary role is to obtain weather data to support the weather forecast and also climatological purposes. Using sensors from Vaisala. Kipp & Zonen and TB3, the data is captured in real time by Nextsense NX7260 data logger. Nx7260 will then process the data and transmit the process data in SYNOP and also raw data format to different systems located in MMD - one being their forecast system and one more for the maintenance support team.

The forecast support systems accept the data in SYNOP format and ingest it into their internal system for further processing and also visualisation. The raw data is distributed to the maintenance and operational team to monitor the health data of the systems and also transmission status.

The datalogger being used in the system is Nextsense NX7260.   NX7260 is capable of performing the various data acquisition, validation, mapping and transformation processing. It is also capable of generating WMO SYNOP data using the various data it collected. It integrates seamlessly to a GSM modem that can transmit the data in various interval using real time streaming protocol or just a simple secured FTP transfer.

On the back-end processing system. AAWS is equipped with modules to capture and log the various data. The data can then be generated into various reporting format or simply been output in a graphical map display showing all the various stations together. The system also allows centralized management fo the 60 AWS where update or changes to the logger (Nx7260) can be centrally performed, without having to visit the site locations.

Photos:

Central Maintenance and Monitoring Module (CMMM)
AAWS System, Malaysian Meteorological Department

Guest

Username:

Password:

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Menu

Station
  Map

Map

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Pejabat Pertanian Daerah Kecil Sundar [60]
Last power on time: 2015-11-22 12:09:53
Last VPN status: Online (2016-03-28 03:01:17)

Kuala Tomani	Locate
Fri Apr 22 23:45:12 GMT+1000 2016	
_utc_time	2016-04-22T13:45:11+0000
1m_modem_cnsmod	No data in last 60 seconds
1m_modem_service	No data in last 60 seconds
1m_modem_signal	No data in last 60 seconds
1m_onboard_power_v	13.0
rt_pressure_mb	978.9
rt_rain_bucket_ctr	0
rt_relative_humidity_pc	80.7
rt_solar_irradiance_v	-0.000021
rt_temperature_c	25.9
rt_wind_dir_deg	105
rt_wind_speed_ms	0.3