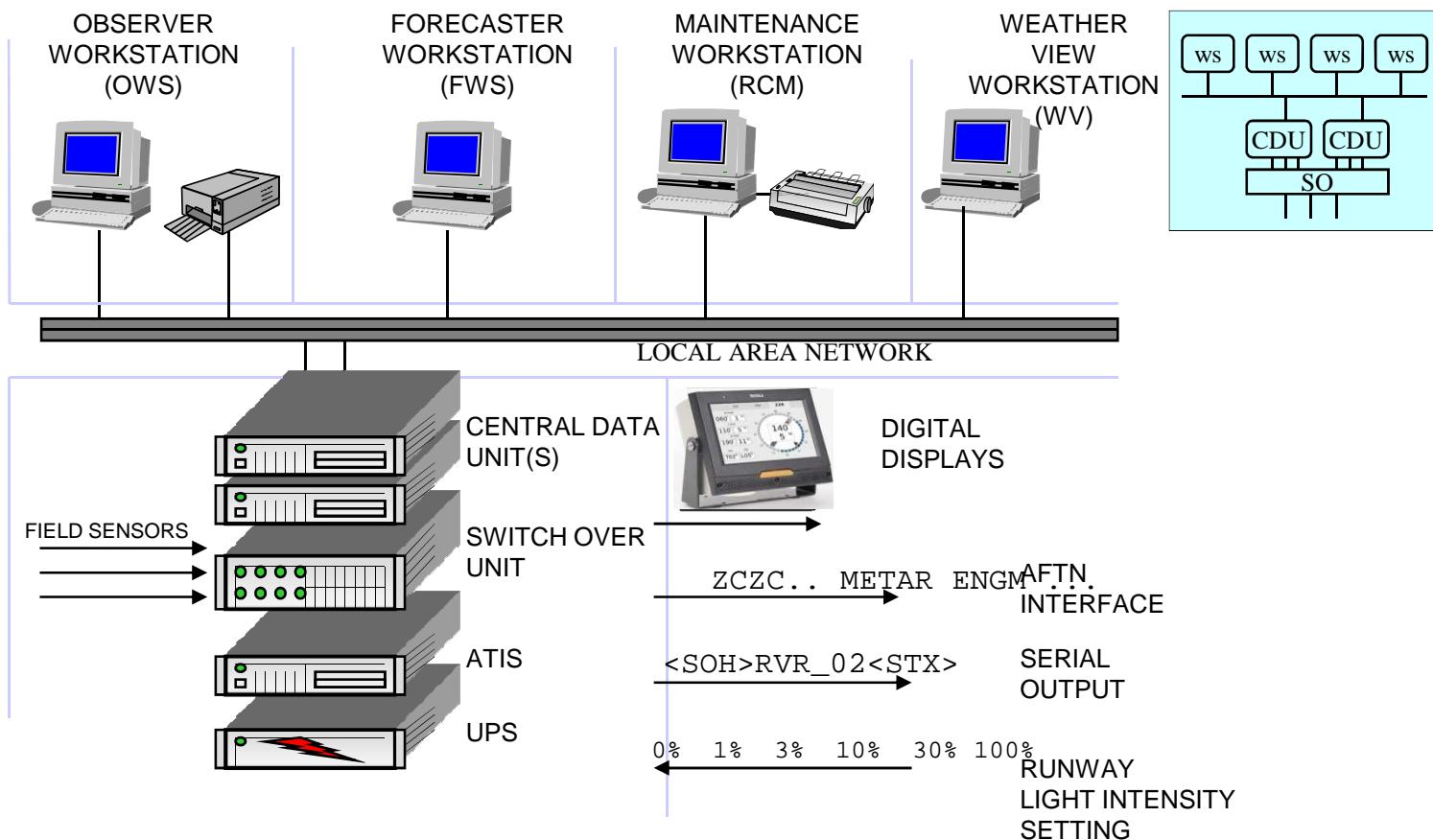
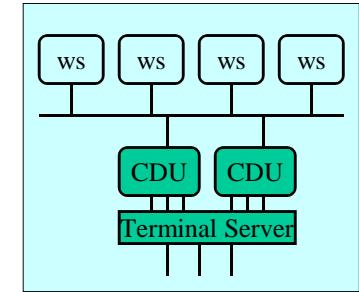


AviMet: System architecture

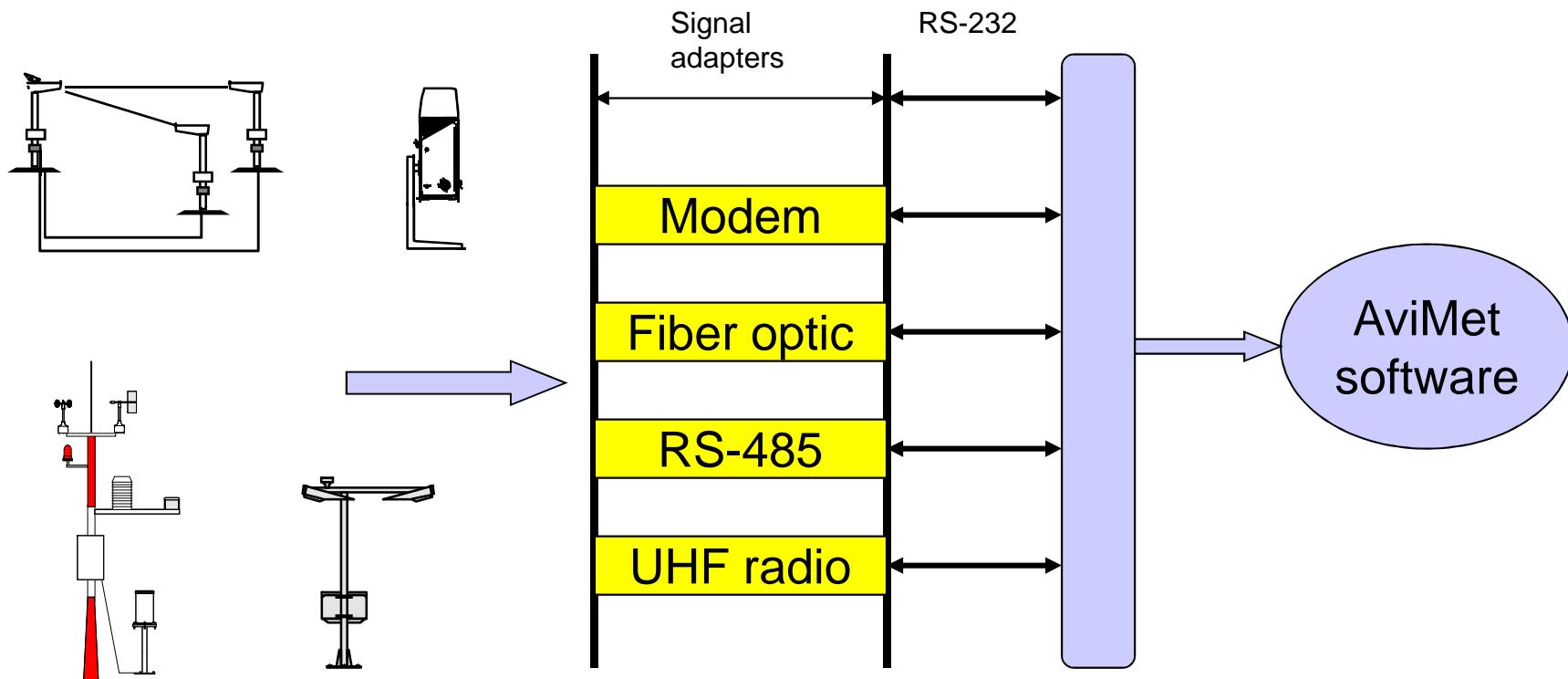


Central Data Unit (CDU)

- CDU tasks
 - Sensor data acquisition and validation
 - Meteorological calculations
 - Sensor service interface
 - Alarm services
 - Single or dual configuration
 - dual hot-standby configuration with Switchover Unit provides increased reliability and uptime

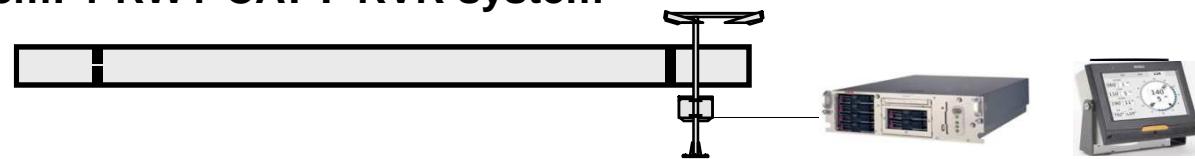


Data acquisition: Field sensor connections

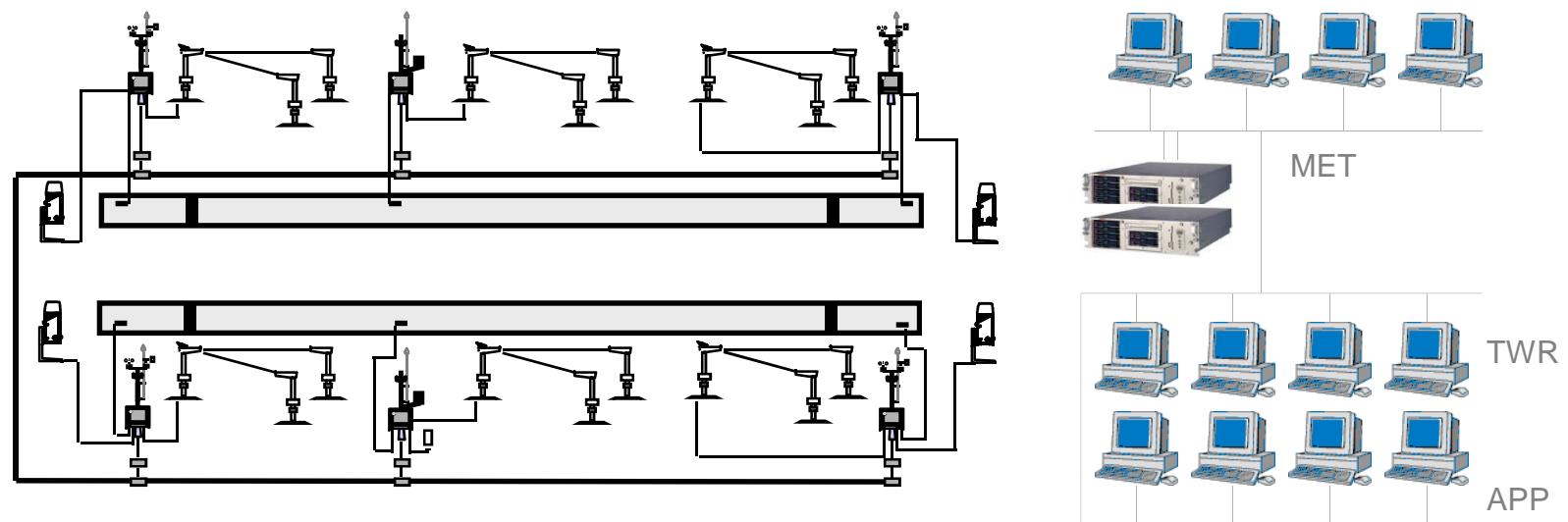


AviMet: Scalability

Small system: 1 RWY CAT I RVR system

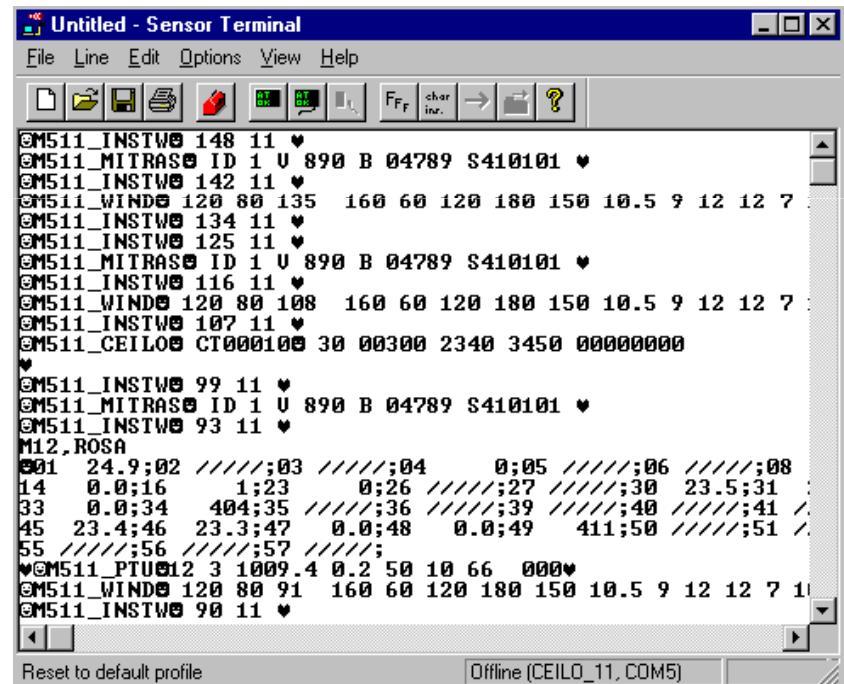


Large system: 2 RWY CAT IIIB AWOS



Sensor service interface

- Direct access to sensors and weather stations for configuration and diagnostics
- Available over a dial-up connection for remote maintenance



The screenshot shows a Windows application window titled "Untitled - Sensor Terminal". The window has a menu bar with File, Line, Edit, Options, View, and Help. Below the menu is a toolbar with icons for file operations like Open, Save, Print, and a search function. The main area is a terminal window displaying sensor data in a structured format. The data includes sensor IDs, names, and values. Some lines start with a double ampersand (&&) and end with a double asterisk (**). The data is as follows:

```
&& Untitled - Sensor Terminal
File Line Edit Options View Help
Open Save Print Find FFF char ins. > < ? 
&& EM511_INSTWE 148 11 **
&& EM511_MITRAS ID 1 U 890 B 04789 S410101 **
&& EM511_INSTWE 142 11 **
&& EM511_WIND@ 120 80 135 160 60 120 180 150 10.5 9 12 12 7
&& EM511_INSTWE 134 11 **
&& EM511_INSTWE 125 11 **
&& EM511_MITRAS ID 1 U 890 B 04789 S410101 **
&& EM511_INSTWE 116 11 **
&& EM511_WIND@ 120 80 108 160 60 120 180 150 10.5 9 12 12 7
&& EM511_INSTWE 107 11 **
&& EM511_CEIL@ CT000100 30 00300 2340 3450 00000000
&
&& EM511_INSTWE 99 11 **
&& EM511_MITRAS ID 1 U 890 B 04789 S410101 **
&& EM511_INSTWE 93 11 **
M12,ROSA
&01 24.9;02 /////;03 /////;04 0;05 /////;06 /////;08
14 0.0;16 1;23 0;26 /////;27 /////;30 23.5;31
33 0.0;34 404;35 /////;36 /////;39 /////;40 /////;41
45 23.4;46 23.3;47 0.0;48 0.0;49 411;50 /////;51
55 /////;56 /////;57 //////
&& EM511_PTU@12 3 1009.4 0.2 50 10 66 0000**
&& EM511_WIND@ 120 80 91 160 60 120 180 150 10.5 9 12 12 7 10
&& EM511_INSTWE 90 11 **

Reset to default profile Offline (CEILO_11, COM5)
```

Meteorological messages and AFTN

- METAR/SPECI
- SYNOP
- TAF
- SIGMET
- AFTN interface:
 - message formats: IA-5, ITA-2
 - viewing of outgoing messages
 - message transmission via serial port, TCP/IP socket or FTP

- Data storage for...
 - measured and calculated variables
 - meteorological messages
 - alarms
- Up to one year storage time
- Human-readable file format
- Viewer application for easy access to data

ASCII Log View - [RVR01_15.his]

File Edit View Window Help

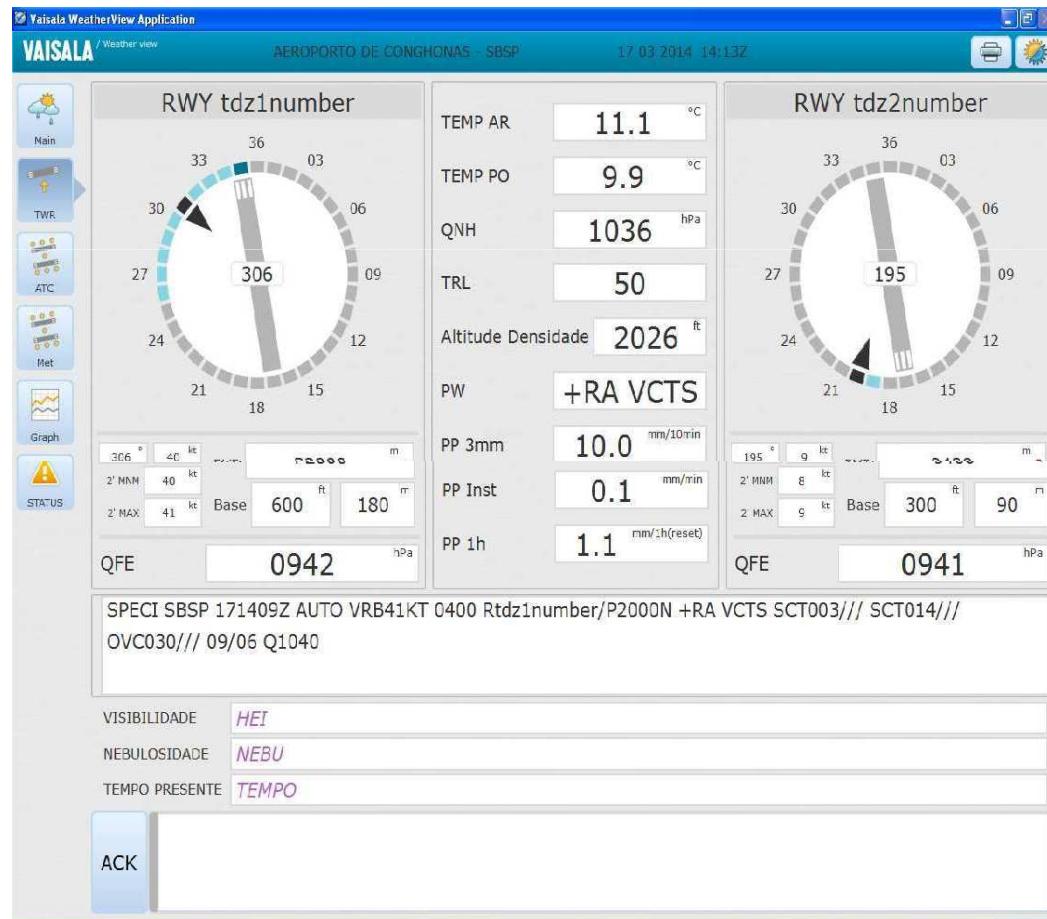
CREATEDATE SITE RVR_1A RVR_10M RVR_10A RVR_10X RVR_TEND MOR_1A MOR_10M

CREATEDATE	SITE	RVR_1A	RVR_10M	RVR_10A	RVR_10X	RVR_TEND	MOR_1A	MOR_10M
2000-03-15 01:27:00	12	800	650	750	1100	0	250	100
2000-03-15 01:28:00	12	600	500	700	1100	0	150	100
2000-03-15 01:29:00	12	450	400	550	700	0	100	100
2000-03-15 01:30:00	12	500	400	500	550	-1	150	100
2000-03-15 01:31:00	12	550	400	500	550	-1	150	100
2000-03-15 01:32:00	12	750	400	550	900	-1	200	100
2000-03-15 01:33:00	12	1100	400	550	1100	-1	350	100
2000-03-15 01:34:00	12	1000	750	1000	1100	0	300	100
2000-03-15 01:35:00	12	1300	900	1100	1300	1	450	100
2000-03-15 01:36:00	12	1300	900	1200	1300	1	400	100
2000-03-15 01:37:00	12	1300	900	1200	1300	1	450	100
2000-03-15 01:38:00	12	1300	900	1200	1400	1	450	100
2000-03-15 01:39:00	12	1100	900	1200	1400	1	350	100
2000-03-15 01:40:00	12	1000	800	1100	1400	1	300	150
2000-03-15 01:41:00	12	800	650	1100	1400	0	250	150
2000-03-15 01:42:00	12	550	500	1100	1400	-1	150	150
2000-03-15 01:43:00	12	650	500	600	650	-1	150	150
2000-03-15 01:44:00	12	700	600	650	750	-1	200	150
2000-03-15 01:45:00	12	650	600	650	750	1	200	150

Ready Records: 393 MIDAS IV

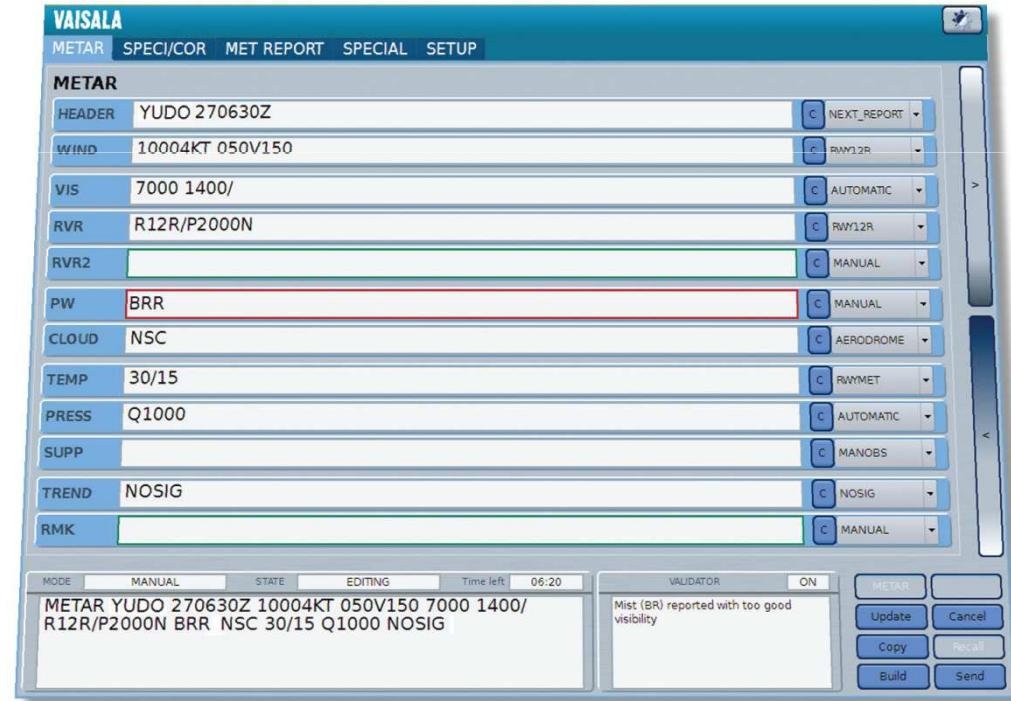
Applications: Weather View

- Any measured or calculated data can be displayed
- Up to 6 pages for different configurations
- Read-only access



Applications: METAR Template

- edit, validate and send METAR and SPECI
- opens automatically on schedule with data from sensors
- adjustable editing time
- parameter cross-checking
- automated METAR optional
- corrected and delayed messages



Digital Display



- Vaisala WID511 Digital Display for Wind data.
- Vaisala WID511TU Digital Display for Wind, Temperature and Humidity data.