

Vaisala Processing Unit DMC586 / DMC586M

- **Complies with NTCIP protocol for data post-processing**
- **Ample RAM and compact flash memory**
- **Extends range of road weather applications in which Vaisala ROSAs can be used**

The Vaisala Processing Unit DMC586/DMC586M carries out data post-processing for the Vaisala ROSA Road/Runway Weather Station in accordance with the North American NTCIP protocol for road weather applications. The DMC586's ample processing power and memory make it possible to use Vaisala ROSAs in a far wider range of road weather applications than was previously possible.

The heart of the Vaisala Processing Unit DMC586 is an x86-compatible, 133 MHz PC104 card. To minimize power consumption, a BIOS is used to limit the DMC586's speed to 66 MHz. The DMC586's RAM and compact flash memory is sufficient for storing historical data and for demanding applications. It can be extended if required.

The DMC586 has three external RS-232 serial lines (COM1, 2 and 3). Communication between ROSA DRI interface cards and the DMC586 can be handled with an external serial line. In addition to the serial port, the DMC586 also features an Ethernet connection.



DMC586M MODEM VERSION

The DMC586M version features a built-in 56 kbit modem. To connect the modem to the PSTN, the DMC586M has a place for the PSTN connection plug. The internal modem is connected through an internal serial port (COM4) to the PC104 card in order to keep the three external lines free.

The pre-installed operating system is Linux: web and FTP services are pre-installed and ready to operate without extra configuration work, and the DMC586M supports TCP/IP connection either by Ethernet or PPP connection via a serial port.

TECHNICAL INFORMATION

PROCESSOR AND MEMORY

Processor	x86 compatible, AMD ELAN520SC 133MHz
CPU speed in use	66MHz
Memory	16MB RAM, 16MB Compact Flash

COMMUNICATIONS

External RS-232 serial ports	COM1, COM2 and COM3 Baud rates 50-115200
Internal serial port (for modem module)	COM4
LAN Ethernet	10/100Base-T Ethernet
Modem (only in DMC586M)	56K Data/Fax Modem uses serial port COM4

PRE-INSTALLED OPERATING SYSTEM

Linux version 2.4 including e.g. WEB server and FTP service
TCP/IP connection through Ethernet or with PPP via serial port.

ELECTRICAL

Power supply	+9VDC ... +35VDC
Power consumption @24VDC	3.4W typical (4.3W typical DMC586M) 4.8W max (5.8W max DMC586M)
Power consumption @12VDC	3.2W typical (4.1W typical DMC586M) 4.6W max (5.6W max DMC586M)

MECHANICAL

Dimensions	180 x 98 x 40 mm
Weight	301 g (314 g DMC586M)

ENVIRONMENTAL

Temperature	-40°C ... +60°C
Humidity	0 to 100% RH, non-condensing
Vibration	IEC-68-2-6 Fc, 10-500 Hz, up to 2.0 G
EMC	Complies with 89/336/EEC (FCC15 part J)

INSTALLATION

The DMC586 (DMC586M) can be installed in ROSA frames DMF132 and DMF133. Installation into the DMF031 frame is not supported.



Your Partner in All Weather

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