

Storm Products

Virgo M&P- Vehicle & Coldstore Recorders with Printer & Display

Product Brief :

- Built to BSI ISO 9001:2000 standards by a Company with thousands of recorders in the field.
- Robust Cost Effective & Reliable
- Robust Stainless Steel or Polycarbonate enclosure. IP65 Protected.
- Easy to Wire & install
- Standard Memory with Extended Option.
- 6 Temperature sensors & 4 events .
- Rugged construction and vibration tested to meet EEC regulations
- Operates on supplies from
Vehicles types; 9 to 36 volts dc
Cold Stores types: 220/240v 50/60 Hz ac.
- Uses the latest Flash memory storage technology .
- Operates in 7 user selectable European Languages.
- Manufacturer's 2 years warranty.
- Simple four stud fixing
- Full EMC compliance for emissions and perturbations.
- RS232 output for Ramlog & PC or Laptop.
- Interrogation software fully Windows 95, 98 , 2000, ME, XP & NT (wkstn) compatible.
- * Now with Print back from date facility



RECORDERS WITH PRINTER



Storm Product's innovative **Virgo** range of Vehicle & Coldstore recorders with printer and display is based on many years experience in the design, manufacture & supply of reliable recorders to the transport and refrigerated storage industry.

The latest version of the **Virgo-M** is, smaller and lighter than its predecessor but still retains the rugged versatility and cost effectiveness of this well established recorder range.

The Virgo range include standard in-cab and externally fitted recorders, all rated to IP65, for stand alone use.

Both Virgo-M and P types can now be supplied with internal mains power supplies for use in Cold Store locations where mains voltage is the norm.

The units simple menu driven set up facility allows the user to set the unit for local parameters such as language , alarm settings, recording intervals, vehicle registration, company name etc.

The unit is supplied in a Stainless Steel or Polycarbonate enclosure both of which are sealed to IP65.

A heater accessory unit is available for metal versions that allow the printer to operate in ambient temperatures of -30C

The **Virgo** range continues to uphold Storm Products long tradition of reliability and value for money.

**IP65 Rated Recorders with Printers
Stainless Steel & Polycarbonate Enclosures
Virgo - Range**

Technical Specification

MEETS
AFNOR E18-150 & EN12830 & UNE82500
STANDARDS

Input Voltage: Vehicle Version: 9 to 36 volts dc.
Cold Store version: 220/240v 50/60 Hz ac
with adapter

Sensor Channels: 1 to 6
Event Channels: Doors : 2
Defrost: 2

Electrical safety:
NF C 42-010 & EN61010-1
Electrical Perturbations:
NF C 46-023 & EN50081-1 & EN50082-1

Battery Back up:
Operating:
Data in memory: Indefinitely
Clock: Indefinitely
Stand-by:
Data in memory: Indefinitely
Clock: 5 years minimum.

Data Storage Memory size:
Readings before roll over:
Standard 7592/Channel

Temperature measurement range:
-40 to +50 Degrees Centigrade

Sensor response time:
Less than 10 min at air flow of 1 metre/sec.
Resolution: **Class 1** 0.1 Degrees Cent.
Accuracy: **Class 1** +/- 0.5 Degrees Cent.

Storage Intervals: 1 to 60 minutes adjustable

Clock Time Error: Less than +/- 0.1 %

Language selection: English, French, German, Dutch
Italian, Spanish, Danish

Control Keys: 4 off

Display: 2 x 16 Super twist

Printer: 24 Col. Impact printer.
Print Speed: 1 line per second
Paper Roll Length: 15 metres

Monitor Environmental Specification

Temperature:
Operating : -30 to +65 Celsius
Storage: -40 to +85 Celsius

Printer Environmental Specification

Operating: -10 to +50 Celsius
Storage -20 to +60 Celsius
NB. Heater kit available for operation of printer to – 30C.

Humidity:
Operating: 5 to 95% non-condensing.
Non Operating: 5 to 95% non-condensing.

Enclosure protection: EN 60529 rated IP65

Shock Tests: EN 60068-2-27

Vibration Tests:
Frequency: 5 HZ to 150 HZ
Frequency Steps: 8.6 Hz.
Amplitude: 10 mm
Acceleration: 29.4 m/s/s =3g

Data Storage Capacity: 160 days (Standard)

Physical Dimensions	Metal	Polycarbonate
Length:	230 mm	213 mm
Height:	182 mm	180 mm
Depth:	85 mm	110 mm
Weight:	2.4 Kg.	1.6 Kg
Screw Fittings:	4	4
Colour:	White	Grey
Enclosure material:	Stainless Steel	Polycarbonate

Data Interface: RS232 9 Pin D connector 9600 baud

CEE Test House : **The University of Paisley
& CITS**

Interference Immunity Conformance

Radiated Emissions EN55022 (1987) Class B
Electrostatic Discharge EN 6000-4-2.
Radiated Immunity EN 6000-4-3
Fast Transient Bursts EN 6000-4-4.

Calibration: Self Calibrating

Quality Standards:
Design & Manufacture BSI ISO 9001:2000

Accessories

Standard Sensors:
Stainless steel bullet, cable sizes as required.

Cdata : Down load & interrogation Software:

Storm Products



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