

ENVIRONMENTAL AND WEATHER MONITORING SYSTEM

Mod. SIMO-M/EV

INTRODUCTION

The **ENVIRONMENTAL AND WEATHER MONITORING SYSTEM** consists of a set of equipment and sensors used to test the design, installation and control of hardware and software applications.

The equipment includes a main system and various optional accessories.

- **Main system mod. SIMO-M/EV for data acquisition and processing;** it consists of:
 - 1 Weather data system
 - 1 Complete set of sensors
 - 1 Software for data acquisition and processing to be installed on a **PC (not included)**.
- The **system for data transmission on a dedicated network** is an option to be used if a system SIMO-M EV must be connected with a remote PC through a dedicated network. It consists of:
 - 2 Baseband Modem Trainers mod. BM/EV
 - 1 Data tester mod. DT1/EV (optional)
 - 2 Interface Testers mod. VIF/EV (optional)
- The **system for data transmission on a voice network** is an option to be used if a system SIMO-M/EV must be connected with a remote PC through a voice (switched) network. It consists of:
 - 2 Multistandard Modem Trainers mod. VM-34/EV
 - 1 Switching & Transmission Trainer mod. PCM/EV
 - 1 Data tester mod. DT1/EV (optional)
 - 2 Interface Testers mod. VIF/EV (optional)
- The **system for data transmission on voice & dedicated network** is an option to be used if a system SIMO-M/EV must be connected with a remote PC through a voice (switched) network and / or a dedicated network. This option integrates the two a.m. data transmission systems. It consists of:
 - 2 Multistandard Modem Trainers mod. VM-34/EV
 - 2 Baseband Modem Trainers mod. BM/EV
 - 1 Switching & Transmission Trainer mod. PCM/EV
 - 1 Data tester mod. DT1/EV (optional)
 - 2 Interface Testers mod. VIF/EV (optional)
- The **system for data transmission PRO on a dedicated network** is an option to be used if a system SIMO-M/EV must be connected with a remote PC through a dedicated network and a commercial (non educational) modem. It consists of:
 - 2 Hi-End Commercial Baseband Modems mod. BM-P/EV



This illustration shows the Environmental and Weather Monitoring System

ENVIRONMENTAL AND WEATHER MONITORING SYSTEM mod. SIMO-M/EV

TRAINING PROGRAM:

- Weather station:
 - Characteristics, operation, installation, configuration
- Sensors:
 - Characteristics, operation, positioning
- Techniques of Mechanical and electrical installation
- Data Transmission:
 - Software installation, control station set-up, hardware set-up and modem programming

TECHNICAL SPECIFICATION:

- Outdoor unit provided with supporting poles, including sensors and data acquisition system: it must be installed in open place without obstacles. For educational use an indoor lab installation without poles is suggested.
- 1 main system for data acquisition and storage consisting of:
 - Keyboard for on board management: 46 keys
 - Data Display: 2 lines
 - 12 analog inputs
 - 4 digital inputs
 - 8 output data (open collector)
 - 2 RS232 interfaces for data transmission and service
 - Memories: 512kB for programs e 384kB for data
 - Key-locked box of stainless steel for outdoor installation (8U)
 - Back-up battery: 1.2 Ah
- Sensors for environmental and weather parameters:
 - Temperature (-30÷60°C), pressure (700÷1100 hPa), HR (0÷100%), direction (0÷360°) and wind speed (0÷50m/s), rain (with receiving surface on 500 cm²), presence of the mains
- 2 Software programs for Windows to be installed on a **PC (not included)**, for:
 - Guided configuration
 - Manual and Automatic Data Download (local and remote)
 - Data display and reporting
- Main pole (h>6m) and external supports for sensors (h=1.8m)
- Cables for sensors complete with connectors (L=12m)

Power supply: 230 Vac 50 Hz single-phase - 25 VA
(Other voltage and frequency under request)

Dimensions: 530 x 410 x 380 mm (main unit)

Total weight: 100 kg

SUPPLIED WITH
THEORETICAL-EXPERIMENTAL
MANUAL

