**Sentry: Solutions for the Data Center Equipment Cabinet**

**Environmental Monitoring Module and Sensors**

---

### Key Features

- Each EMCU-1-1B is accessible via IP through networked CDU
- HTML GUI, Telnet or SNMP management
- Cabinet Environment Status:
  - Supports two dual-function temperature & humidity probes (% RH)
  - Water & fluid detection sensor
- Cabinet Intrusion Detection:
  - Supports four dry contact closure door sensors
- Analog Input Sensor
  - Supports supplementary sensor requiring power feed
- Notification Warnings:
  - SNMP and e-mail alerts through CDUs interface
  - Thresholds & SNMP Traps to two destinations
- IP Management through Sentry CDUs
  - HTML Web Interface
  - Command Line Interface
  - No additional software required
- Mounting
  - Flexible zero U mounting
  - Fast installation -- 5 minutes or less
- Warranty: 2 years

---

**IP-based Solution for Monitoring Environmental Conditions in the Data Center Equipment Cabinet**

Ever increasing densities of vertically racked servers conserve valuable floor space in the data center, but the resulting power consumption and heat dissipation create new concerns for data center managers. Environmental Monitoring, particularly temperature & humidity, is a must for any sensitive infrastructure. The most recent ASHRAE thermal guidelines suggests three measurement points in the equipment rack.

Server Technology Smart and Switched CDUs support two combination temperature/humidity probes on the Master unit. Newer Expansion units support two additional sensors. If additional probes are required, the EMCU-1-1B Environmental Monitor provides additional inputs.

Each EMCU supports:

- 2 Additional temperature and humidity measurements
- Water sensor
- 4 Dry contact closure door sensors

The EMCU-1-1B assures network managers that environmental conditions are within defined tolerances and that unauthorized entry into the equipment cabinets does not go unnoticed.

The EMCU-1-1B can be located in data centers, co-lo sites, web hosting facilities, telecom switching sites, POP sites, server closets, and any unmanned area that needs to be monitored. Install the EMCU-1-1B in the equipment cabinet and gain access to environmental conditions from a web or serial interface through one of Server Technology’s IP addressable CDUs.
## Model Description Mounting

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMCU-1-1B</td>
<td>Environmental Monitor Control Unit with (1) combination Temperature &amp; Humidity Probe 10ft (3m)</td>
<td>Mounting tabs included for zero U mounting</td>
</tr>
<tr>
<td>EMTH-1-1</td>
<td>Temperature &amp; Humidity Probe 10ft (3m)</td>
<td></td>
</tr>
<tr>
<td>EMWS-1-1</td>
<td>Water Sensor Probe, 12 in. (305 mm) detection cable, 10 ft (3 m) connection cord</td>
<td></td>
</tr>
</tbody>
</table>

## Additional Specifications

### Interface through HTML GUI

- **Web Interface**
  - Temperature
  - Humidity
  - Water Detection
  - Door Cabinet Status
- **Repeatability**
  - +/- 0.15 RH / +/- 0.25 °C
  - **Temperature Accuracy**
  - 5 °C to 40 °C: < +/- 0.75 °C
  - 0 °C to 5 °C: < +/- 1 °C
  - 40 °C to 123 °C: < +/- 3 °C
- **Measurement Range**
  - 0% to 100% RH / 0 °C to 123.5 °C
- **Absolute RH Accuracy**
  - 20% to 80% RH: < +/- 3%
  - 0% to 20% and 80% to 100%: < +/- 5%

### Water Sensor Probe
- 1 ft (0.3 m) water sensing cable
- 10 ft (3 m) connector cord
- Flexible, thermally bonded polymer coated sensor for increased strength and durability
- Contact Closure Sensors
  - Accepts up to four 3rd party contact closer sensors. Wago® spring-loaded 3-position terminal block

### LED Confirmation Indicators
- Signal "Fault" conditions to contact closures

### Dimensions (H x W x D)
- EMCU: 4.57 x 2.32 x 1.22 in. (116 x 59 x 31 mm)

### Weight
- EMCU-1-1B: 8.8 oz. (250 g)
- EMTH-1-1: 1.6 oz. (45 g)
- EMWS-1-1: 3.2 oz. (91 g)