Environmental Monitoring
Module and Sensors

Key Features

> Each EMCU-1-1C is accessible via IP through networked PDU
> 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 PDU interface
  > Thresholds & SNMP Traps to two destinations
> IP Management through PDU
  > 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 suggest three measurement points in the equipment rack.

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

Each EMCU supports:
> 2 Additional temperature and humidity measurements [EMTH-2-10]
> Water sensor [EMWS-1-1]
> 4 Dry contact closure door sensors

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

The EMCU-1-1C 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-1-1C in the equipment cabinet and gain access to environmental conditions from a web or serial interface through one of Server Technology’s IP addressable PDUs.
### Additional Specifications

#### Interface through HTML GUI

**Web Interface**
- Temperature
- Humidity
- Water Detection
- Door Cabinet Status

**Measurement Range**
- 0% to 100% RH / 0 °C to 100 °C

**Temperature Accuracy**
- 0 °C to 100 °C: < +/- 1 °C

**Absolute RH Accuracy**
- 0% to 100% RH: < +/- 3.5%

**Analog Sensor**
- Accepts 3rd party analog sensors. Input 0 V to +5 VDC

**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-1-1C: 4.57 x 2.32 x 1.22 in. (116 x 59 x 31 mm)
- EMTH-2-10: 2.1 oz. (60 g)
- EMWS-1-1: 3.2 oz. (91 g)

**Weight**
- EMCU-1-1C: 8.8 oz. (250 g)

### Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Mounting</th>
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</thead>
<tbody>
<tr>
<td>EMCU-1-1C</td>
<td>Environmental Monitor Control Unit with (1) combination Temperature &amp; Humidity Probe 10 ft (3 m)</td>
<td>Mounting tabs included for zero U mounting</td>
</tr>
<tr>
<td>EMTH-2-10</td>
<td>Temperature &amp; Humidity Probe 9.8 ft (3 m)</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>
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