



210E Thermal Probe Multiplexer



The 210E Thermal Probe Multiplexer extends the thermal management capabilities of Lucent's Cabinet Power Systems (CPS) and adds multiple temperature sensors to the reserve batteries.

The 210E Thermal Probe Multiplexer (TPM) improves the sensitivity and accuracy and extends the range of coverage of the thermal management system in the CPS family of small battery plants.

Multiple Sensors

A single TPM module can increase the number of battery-stand thermal probes from four to 10, more than doubling the CPS4000 standard temperature-monitoring capabilities. Adding a second TPM module raises the number of monitoring points to 16.

Wide Temperature Range

Like the CPS, the TPM is well suited for applications in outside or uncontrolled environments, over the full operating temperature range of -40°C to $+75^{\circ}\text{C}$ (-40°F to $+167^{\circ}\text{F}$). At elevated temperatures, reliable thermal monitoring and control is essential to optimum system operation and extends battery service life as well.

Because they enable the monitoring of up to 16 points in battery stands, TPM modules are particularly beneficial in many PCS wireless applications, where more extensive battery systems are typically required.

Other CPS applications that can require more than four thermal probes include:

- Digital loop carrier cabinets
- Remote switching cabinets
- Broadband/CATV cabinets

Benefits

- Improves Thermal Management
 - Upgrades CPS sensitivity and thermal-control capabilities
 - Compatible with CPS thermal-monitoring processes
- Extends CPS Alarm Capabilities to Include:
 - Probe failure
 - TPM microprocessor failure
 - Loss of power to the TPM
- Easy Installation
 - Mountable in any convenient location adjacent to the CPS
 - Available with brackets for mounting on supplementary battery stands
 - Available with Velcro hook and loop sets for mounting directly to a CPS shelf or frame
- Safety/Standards Compliance
 - Complies with *UL**-1950

Features

- Wide input voltage range from 18 Vdc to 60 Vdc
- Small size of 4.6 in. x 2.75 in. x 1.4 in.
- Three LED status indicators

**UL* is a registered trademark of Underwriters Laboratories, Inc.

210E Thermal Probe Multiplexer Specifications

Electrical and Thermal Specifications

Number of Thermistor Inputs	one to eight
Input Voltage Range	18 Vdc—60 Vdc (requires a fuse within the range of 0.5 A—1.33 A in the hot lead)
Input Current	50 mA at 27 Vdc, 25 mA at 54 Vdc
Output Resistance Accuracy	±3 °C at system ambient temperature range of 0 °C to 55 °C; ±4 °C at system ambient temperature ranges of -40 °C to 0 °C and 55 °C to 75 °C
Measurable Temperature Range	-3 °C to +120 °C
Alarm Relay Contact Rating	2 A at 30 Vdc or 0.3 A at 110 V
Operating Temperature Range	-40 °C to +75 °C (-40 °F to +167 °F)

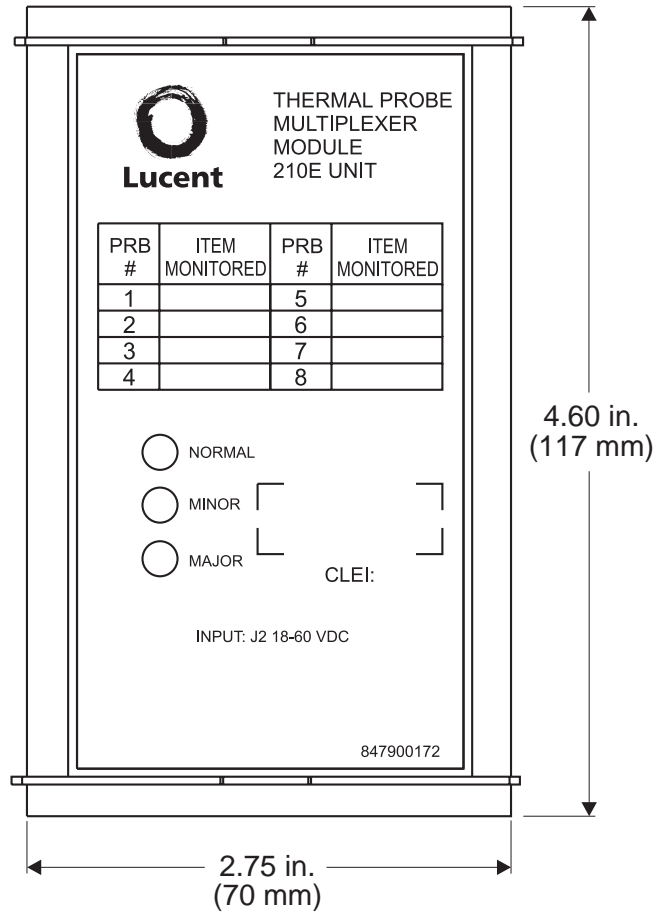
Physical Specifications

Height	4.6 in.
Width	2.75 in.
Depth	1.4 in.

Safety/Standards Compliance

Standard	<i>UL</i> -1950
----------	-----------------

Outline Drawing



Ordering Information

For ordering information or assistance, please contact your Lucent Technologies Energy Solutions sales representative.

Related Product Literature

Document Title

Document Number

CPS4048 Cabinet Power System

DS97-433LIN

CPS4024 Cabinet Power System

DS98-246LIN

CPS4024 +24 V Battery Plant for PCS CDMA Applications

DS97-559LIN

For additional information, contact your Lucent Technologies Account Manager or the following:

POWER SYSTEMS UNIT: Network Products Group, Lucent Technologies Inc., 3000 Skyline Drive, Mesquite, TX 75149, USA

+1-800-526-7819 (Outside U.S.A.: **+1-972-284-2626**, FAX: +1-972-284-2900) (product-related questions or technical assistance)

INTERNET: **<http://www.lucent.com/networks/power>**

E-MAIL: **techsupport1@lucent.com**

ASIA PACIFIC: Lucent Technologies Singapore Pte. Ltd., 750D, Chai Chee Road, #07-06, Chai Chee Industrial Park, Singapore 469004

Tel: **(65) 240 8041**, FAX: (65) 240 8438

CHINA: Lucent Technologies (China) Co., Ltd., SCITECH Place, No. 22, Jian Guo Men Wai Avenue, Beijing 100004, PRC

Tel: **(86) 10-6522 5566 ext. 4187**, Fax: (86) 10-6512 3634

JAPAN: Lucent Technologies Japan Ltd., Mori Building, No. 21, 4-33, Roppongi 1-Chome, Minato-ku, Tokyo 106-8508, Japan

Tel: **(81) 3 5561 5831**, FAX: (81) 3 5561 1616

LATIN AMERICA: Lucent Technologies Inc., Room 416, 2333 Ponce de Leon, Coral Gables, FL 33134, USA

Tel: **+1-305-569-4722**, FAX: +1-305-569-3820

EUROPE: Data Requests: DATALINE: Tel: **(44) 1189 324 299**, FAX: (44) 1189 328 148

Technical Inquiries: GERMANY: **(49) 89 95086 0** (Munich), UNITED KINGDOM: **(44) 1344 865 900** (Ascot),

FRANCE: **(33) 1 40 83 68 00** (Paris), SWEDEN: **(46) 8 594 607 00** (Stockholm), FINLAND: **(358) 9 4354 2800** (Helsinki),

ITALY: **(39) 02 6608131** (Milan), SPAIN: **(34) 91 807 1441** (Madrid)

Lucent Technologies Inc. reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.

Copyright © 1999 Lucent Technologies Inc.

All Rights Reserved

Printed in U.S.A.



Printed on
Recycled Paper

Lucent Technologies
Bell Labs Innovations



PN98-007LIN