# SERVICE NOTE

Supersedes: 34901A-04A

## 34901A 20-Channel Armature Multiplexer

Serial Numbers: <a href="http://www.agilent.com/find/tempcardproblem">http://www.agilent.com/find/tempcardproblem</a>

## The Problem – 34901A temperature measurements out of specification

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required: Refer to the required equipments below

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
MODIFICATION RECOMMENDED					
ACTION CATEGORY:	[[]] IMMEDIATELY X ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hours			
LOCATION CATEGORY:	[[]] CUSTOMER INSTALLABLE [[]] ON-SITE X SERVICE CENTER	SERVICE INVENTORY:	X RETURN [[]] SCRAP [[]] SEE TEXT	USED PARTS:	X RETURN [[]] SCRAP [[]] SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: June 1, 2007			
AUTHOR: TP	PRODUCT LINE: PLSP-SOURCE_MEAS				
ADDITIONAL INFORMATION:					
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## Situation:

It was discovered that the module cards 34901A were incorrectly calibrated in production. Inaccurately calibrated temperature sensors on these cards will cause thermocouple measurement error only using the internal temperature reference to exceed published specifications.

The mis-calibration only affects thermocouple measurements that use the internal reference, but do not affect thermocouple measurements using external and fixed temperature references. Other measurements such as voltage, resistance and current are not affected by the issue.

## Solution/Action:

Test and, if necessary, calibrate:

• All units within the described serial number ranges will exhibit the described problem with one exception. If a calibration has been performed on your card after it was shipped from Agilent, a second calibration is not necessary.

Test Equipment Required:

- J type calibrated thermocouple with 0.1 degree C or better accuracy
- Ice bath or Fluke 5520A Calibrator or equivalent

Test Procedure:

• Follow the procedures in section "Thermocouple Reference Junction Verification" on page 112 of the 34970A Service Guide manual

Calibration Equipment Required:

• One 34308A thermistor kit

Calibration Procedure:

- To perform your own calibration, follow the procedures in section "Thermocouple Reference Junction Adjustments" on page 113 of the 34970A Service Guide manual
- To request that Agilent calibrate your product, contact your local Agilent service center
  - Note: No calibration certificate will be provided