

HIOKI

Instruction Manual

3269

POWER SUPPLY

HIOKI E. E. CORPORATION

December 2014 Revised edition 6 3269A981-06 14-12H



* 6 0 0 0 4 3 4 1 6 *

Contents

Introduction	1
Inspection.....	1
Safety Notes	2
Operating Precautions	5
Chapter 1 Overview	9
1.1 Product Overview	9
1.2 Names of Parts.....	9
Chapter 2 Measurement Procedure	11
2.1 Preparations	11
2.2 Measurement Procedure	12
Chapter 3 Specifications	13
Chapter 4 Maintenance and Service	15
4.1 Cleaning and Service	15

Introduction

Thank you for purchasing the HIOKI Model 3269 Power Supply. To obtain maximum performance from the device, please read this manual first, and keep it handy for future reference.

Inspection

When you receive the device, inspect it carefully to ensure that no damage occurred during shipping. If damage is evident, or if it fails to operate according to the specifications, contact your dealer or Hioki representative.

Supplied accessories

- Power cord 1
- Instruction Manual 1

Safety Notes



This device is designed to comply with IEC 61010 Safety Standards, and has been thoroughly tested for safety prior to shipment. However, mishandling during use could result in injury or death, as well as damage to the device. Using the device in a way not described in this manual may negate the provided safety features.

Be certain that you understand the instructions and precautions in the manual before use. We disclaim any responsibility for accidents or injuries not resulting directly from device defects.

This manual contains information and warnings essential for safe operation of the device and for maintaining it in safe operating condition. Before using it, be sure to carefully read the following safety precautions.

Safety Symbols

	In the manual, the  symbol indicates particularly important information that the user should read before using the device.
	The  symbol printed on the device indicates that the user should refer to a corresponding topic in the manual (marked with the  symbol) before using the relevant function.
	indicates a grounding terminal.
	Indicates AC (Alternating Current).
	Indicates the ON side of the power switch.
	Indicates the OFF side of the power switch.

The following symbols in this manual indicate the relative importance of cautions and warnings.

 <u>DANGER</u>	Indicates that incorrect operation presents an extreme hazard that could result in serious injury or death to the user.
 <u>WARNING</u>	Indicates that incorrect operation presents a significant hazard that could result in serious injury or death to the user.
 <u>CAUTION</u>	Indicates that incorrect operation presents a possibility of injury to the user or damage to the device

Measurement categories

To ensure safe operation of measurement devices, IEC 61010 establishes safety standards for various electrical environments, categorized as CAT II to CAT IV, and called measurement categories.

CAT II: Primary electrical circuits in equipment connected to an AC electrical outlet by a power cord (portable tools, household appliances, etc.)

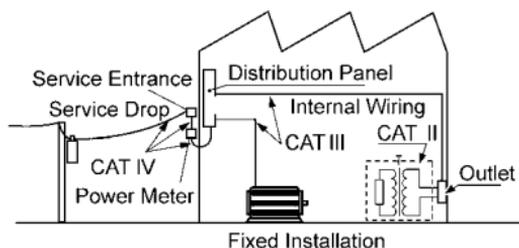
CAT II covers directly measuring electrical outlet receptacles.

CAT III: Primary electrical circuits of heavy equipment (fixed installations) connected directly to the distribution panel, and feeders from the distribution panel to outlets.

CAT IV: The circuit from the service drop to the service entrance, and to the power meter and primary overcurrent protection device (distribution panel).

Using a measurement device in an environment designated with a higher-numbered category than that for which the device is rated could result in a severe accident, and must be carefully avoided.

Use of a measurement instrument that is not CAT-rated in CAT II to CAT IV measurement applications could result in a severe accident, and must be carefully avoided.



Operating Precautions



Follow these precautions to ensure safe operation and to obtain the full benefits of the various functions.

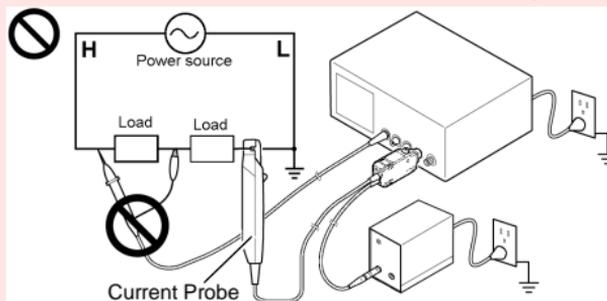
Before Use

Before using the device for the first time, verify that it operates normally to ensure that no damage occurred during storage or shipping. If you find any damage, contact your dealer or Hioki representative.

⚠ DANGER

- To avoid accidents, when using other measurement devices with this one, observe the usage precautions described for each device.
- When using a measurement instrument that does not provide isolation between its input terminals and chassis or other input terminals, please pay attention to the following points.

If a signal is applied to an input terminal other than that to which the current probe is connected, do not connect the ground-side terminal to any non-ground potential. Otherwise, short-circuit current will flow through the current probe or this device from the ground terminal, which could cause an electrical accident or damage.

**⚠ WARNING**

To avoid electrical accidents and to maintain the safety specifications of this device, connect the power cord only to a 3-contact (two-conductor + ground) outlet.

 CAUTION

Observe the following to avoid damage to the device.

- Installation and Operating Environment
Between 0 and 40°C (32 and 104°F); 80%RH or less; indoors only.
- Do not store or use the device where it could be exposed to direct sunlight, high temperature or humidity, or condensation. Under such conditions, the device may be damaged and insulation may deteriorate so that it no longer meets specifications.
- This device is not designed to be entirely water- or dust-proof. To avoid damage, do not use it in a wet or dusty environment.
- To avoid damage to the device, protect it from physical shock when transporting and handling. Be especially careful to avoid physical shock from dropping.
- To avoid damaging the power cord, grasp the plug, not the cord, when unplugging it from the power outlet.

Overview

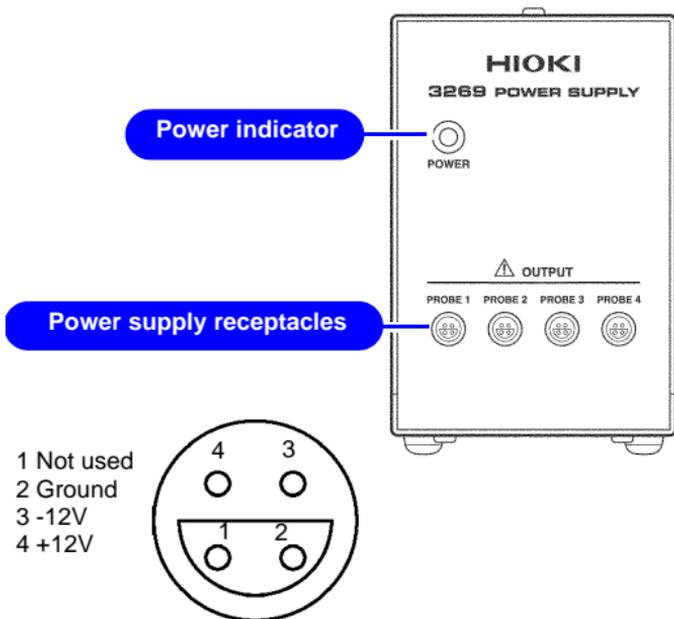
Chapter 1

1.1 Product Overview

This unit is the power supply dedicated to Models 3273-50, 3273, 3274, 3275, and 3276 Clamp on Probe (hereafter referred to as the "current probe"), as well as Models CT6700 and CT6701 Current Probe. The unit can supply power to up to four current probes.

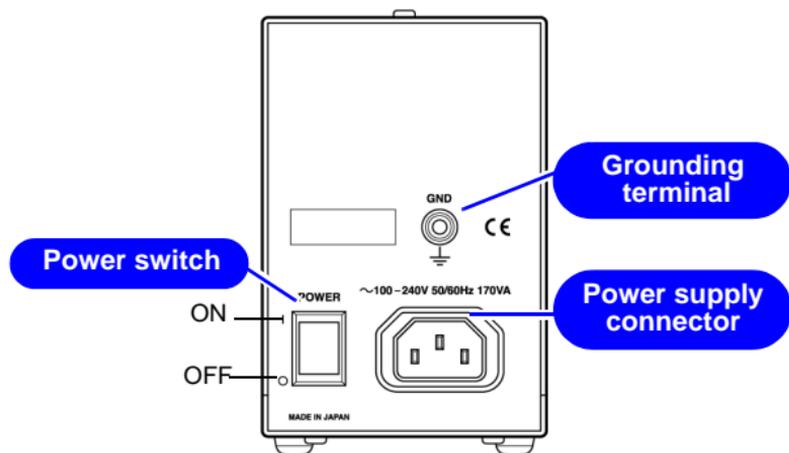
1.2 Names of Parts

Front view



The pin assignment of the receptacles

Rear view



Measurement Procedure

Chapter 2

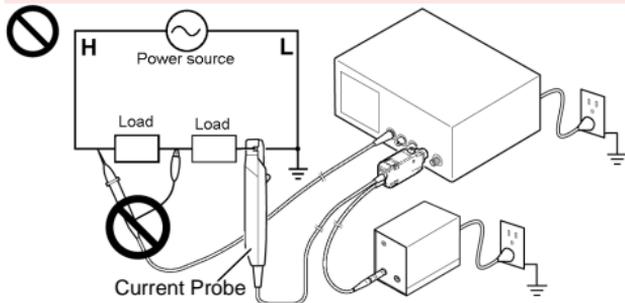
2.1 Preparations



⚠ DANGER

- To avoid accidents, when using other measurement devices with this one, observe the usage precautions described for each device.
- When using a measurement instrument that does not provide isolation between its input terminals and chassis or other input terminals, please pay attention to the following points.

If a signal is applied to an input terminal other than that to which the current probe is connected, do not connect the ground-side terminal to any non-ground potential. Otherwise, short-circuit current will flow through the current probe or this device from the ground terminal, which could cause an electrical accident or damage.





Before turning the device on, make sure the supply voltage matches that indicated on its power connector. Connection to an improper supply voltage may damage the device and present an electrical hazard.

1. Turn the power switch off and connect the power cord.
To avoid electrical accidents and to maintain the safety specifications of this device, connect the power cord only to a 3-contact (two-conductor + ground) outlet.
2. Connect the power plug of the sensor to be used to the power receptacle of the 3269.
3. Turn the 3269 power switch on, and check that the front panel power indicator lights.

2.2 Measurement Procedure

See the 3273-50, 3273, 3274, 3275, 3276, CT6700, or CT6701 instruction manual.

Specifications

Chapter 3

Product Specifications

Compatible sensors	3273-50, 3273, 3274, 3275, 3276, CT6700, CT6701
Number of power supply connectors	4
Output voltage	$\pm 12\text{ V} \pm 0.5\text{ V}$
Rated output current	$\pm 2.5\text{ A}$ (sum total of all channels)
Ripple voltage	50 mVp-p or less
Load influence	Within output voltage limits indicated above for current output in the range 0 to $\pm 2.5\text{ A}$
Temperature influence	Within output voltage limits indicated above for ambient temperature in the range 0 to 40°C (32 to 104°F)
Rated supply voltage	100 to 240V AC (50/60Hz) (Voltage fluctuations of $\pm 10\%$ from the rated supply voltage are taken into account.)
Maximum rated power	170 VA
Operating temperature and humidity range	0 to 40°C (32 to 104°F), 80%RH or less (no condensation)
Storage temperature and humidity range	-10 to 50°C (14 to 122°F), 80%RH or less (no condensation)
Location for use	Indoor, altitude up to 2000 m (6562 feet)
Dimensions, Mass	Approx. 80W x 119H x 200D mm (3.15"W x 4.69"H x 7.87"D) Approx. 1.2 kg (42.3 oz.)
Accessories	Instruction Manual Power cord
Standards applying	Safety EN61010, Pollution Degree 2 EMC EN61326, EN61000-3-2, EN61000-3-3

Memo

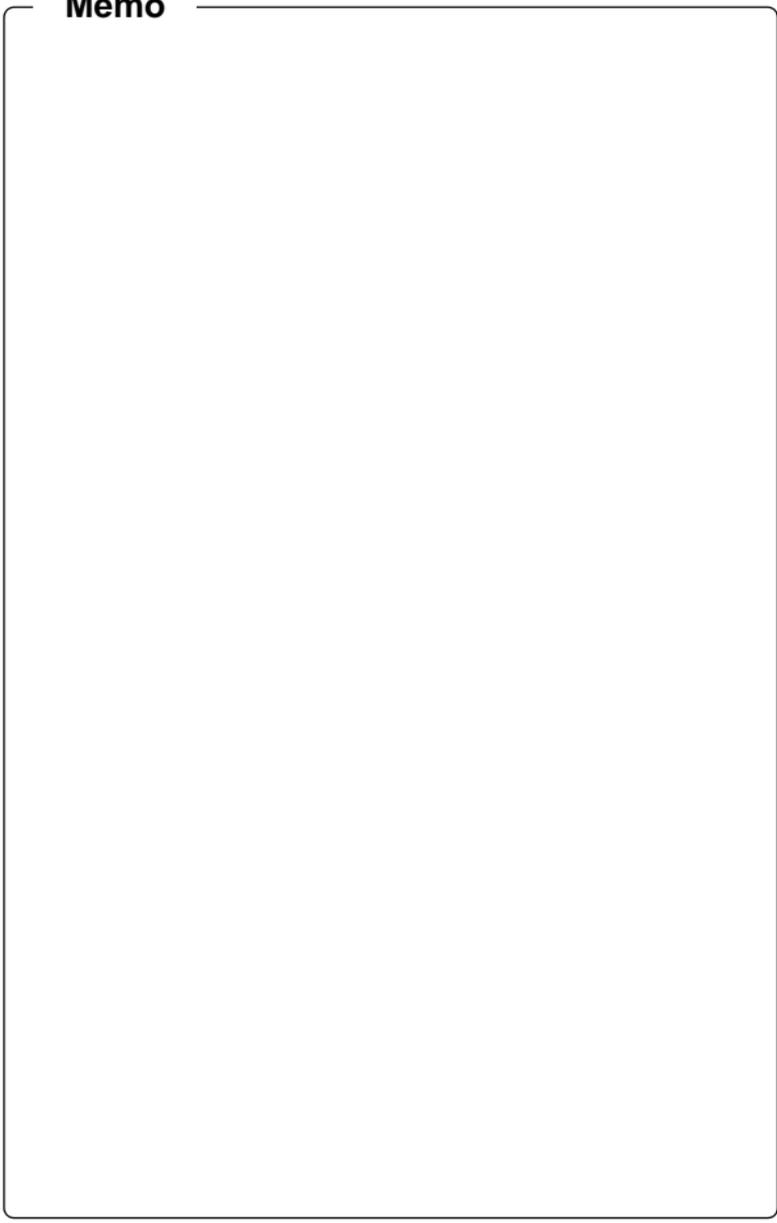
Maintenance and Service

Chapter 4

4.1 Cleaning and Service

- To clean the device, wipe it gently with a soft cloth moistened with water or mild detergent. Never use solvents such as benzene, alcohol, acetone, ether, ketones, thinners or gasoline, as they can deform and discolor the case.
- If damage is suspected, contacting your dealer or Hioki representative.
- When sending the device for repair, pack carefully to prevent damage in transit. Include cushioning material so the device cannot move within the package. Be sure to include details of the problem. Hioki cannot be responsible for damage that occurs during shipment.

Memo



Warranty Certificate

Model	Serial No.	Warranty period One (1) year from date of purchase (___ / ___)
<p>This product passed a rigorous inspection process at Hioki before being shipped.</p> <p>In the unlikely event that you experience an issue during use, please contact the distributor from which you purchased the product, which will be repaired free of charge subject to the provisions of this Warranty Certificate. This warranty is valid for a period of one (1) year from the date of purchase. If the date of purchase is unknown, the warranty is considered valid for a period of one (1) year from the product's date of manufacture. Please present this Warranty Certificate when contacting the distributor. Accuracy is guaranteed for the duration of the separately indicated guaranteed accuracy period.</p> <ol style="list-style-type: none">Malfunctions occurring during the warranty period under conditions of normal use in conformity with the Instruction Manual, product labeling (including stamped markings), and other precautionary information will be repaired free of charge, up to the original purchase price. Hioki reserves the right to decline to offer repair, calibration, and other services for reasons that include, but are not limited to, passage of time since the product's manufacture, discontinuation of production of parts, or unforeseen circumstances.Malfunctions that are determined by Hioki to have occurred under one or more of the following conditions are considered to be outside the scope of warranty coverage, even if the event in question occurs during the warranty period:<ol style="list-style-type: none">Damage to objects under measurement or other secondary or tertiary damage caused by use of the product or its measurement resultsMalfunctions caused by improper handling or use of the product in a manner that does not conform with the provisions of the Instruction ManualMalfunctions or damage caused by repair, adjustment, or modification of the product by a company, organization, or individual not approved by HiokiConsumption of product parts, including as described in the Instruction ManualMalfunctions or damage caused by transport, dropping, or other handling of the product after purchaseChanges in the product's appearance (scratches on its enclosure, etc.)Malfunctions or damage caused by fire, wind or flood damage, earthquakes, lightning, power supply anomalies (including voltage, frequency, etc.), war or civil disturbances, radioactive contamination, or other acts of GodDamage caused by connecting the product to a networkFailure to present this Warranty CertificateFailure to notify Hioki in advance if used in special embedded applications (space equipment, aviation equipment, nuclear power equipment, life-critical medical equipment or vehicle control equipment, etc.)Other malfunctions for which Hioki is not deemed to be responsible <p>*Requests</p> <ul style="list-style-type: none">Hioki is not able to reissue this Warranty Certificate, so please store it carefully.Please fill in the model, serial number, and date of purchase on this form. <p style="text-align: right;">13-09</p>		
HIOKI E.E. CORPORATION 81 Koizumi, Ueda, Nagano 386-1192, Japan TEL: +81-268-28-0555 FAX: +81-268-28-0559		

- Please visit our website at <http://www.hioki.com> for the following:
 - Regional contact information
 - The latest revisions of instruction manuals and manuals in other languages.
 - Declarations of Conformity for instruments that comply with CE mark requirements.
- All reasonable care has been taken in the production of this manual, but if you find any points which are unclear or in error, please contact your supplier or the International Sales and Marketing Department at Hioki headquarters.
- In the interests of product development, the contents of this manual are subject to revision without prior notice.
- The content of this manual is protected by copyright.
No reproduction, duplication or modification of the content is permitted without the authorization of Hioki E.E. Corporation.

HIOKI

HIOKI E. E. CORPORATION

Headquarters

81 Koizumi, Ueda, Nagano 386-1192, Japan
TEL +81-268-28-0562 FAX +81-268-28-0568
E-mail: os-com@hioki.co.jp
(International Sales and Marketing Department)

<http://www.hioki.com/>

HIOKI USA CORPORATION

E-mail: hioki@hiokiusa.com <http://www.hiokiusa.com>

HIOKI (Shanghai) Sales & Trading Co., Ltd.

E-mail: info@hioki.com.cn <http://www.hioki.cn>

HIOKI INDIA PRIVATE LIMITED

E-mail: hioki@hioki.in <http://www.hioki.in>

HIOKI SINGAPORE PTE. LTD.

E-mail: info@hioki.com.sg

1407