

2271A

Automated Pressure Calibrator

Safety Information

Introduction

This document supplies safety information for the 2271A Automated Pressure Calibrator (the Product). For complete Product information, see the Users Manual on the Product CD.

Contact Fluke Calibration

To contact Fluke Calibration, call one of the following telephone numbers:

- Technical Support USA: 1-877-355-3225
- Calibration/Repair USA: 1-877-355-3225
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31-40-2675-200
- Japan: +81-3-6714-3114
- Singapore: +65-6799-5566
- China: +86-400-810-3435
- Brazil: +55-11-3759-7600
- Anywhere in the world: +1-425-446-6110

To see product information and download the latest manual supplements, visit Fluke Calibration's website at www.flukecal.com.

To register your product, visit <http://flukecal.com/register-product>.

Safety Information

A **Warning** identifies conditions and procedures that are dangerous to the user.

Warning










To prevent possible electrical shock, fire, or personal injury:

- **Read all safety information before you use the Product.**
- **Carefully read all instructions.**
- **Only assemble and operate high-pressure systems if you know the correct safety procedures. High-pressure liquids and gases are hazardous and the energy from them can be released without warning.**
- **Do not use the Product around explosive gas, vapor, or in damp or wet environments.**
- **Do not operate the Product with covers removed or the case open. Hazardous voltage exposure is possible.**
- **Use this Product indoors only.**
- **Do not put the Product where access to the mains power cord is blocked.**
- **Use only the mains power cord and connector approved for the voltage and plug configuration in your country and rated for the Product.**
- **Make sure the ground conductor in the mains power cord is connected to a protective earth ground. Disruption of the protective earth could put voltage on the chassis that could cause death.**
- **Replace the mains power cord if the insulation is damaged or if the insulation shows signs of wear.**

- Do not restrict access to the Product mains power cord. The mains power cord is the mains disconnecting device. If access to the power cord is inhibited by rack mounting, a properly-rated accessible mains disconnecting switch must be provided within reach as part of the installation.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Do not apply more than the rated voltage, between the terminals or between each terminal and earth ground.
- Do not touch voltages >30 V ac rms, 42 V ac peak, or 60 V dc.
- Do not use the Product if it operates incorrectly.
- Disable the Product if it is damaged.
- Do not use test leads if they are damaged. Examine the test leads for damaged insulation and measure a known voltage.
- Keep fingers behind the finger guards on the probes.
- Use good lifting practices when lifting or moving the Product. The Product is an unbalanced load and can weigh as much as 20 kg (44 lb).
- Do not use CPS with flammable or combustible liquids.
- Only use the CPS with a pressure controller rated for no greater than the maximum working pressure (MWP) of the CPS 20 MPa (3,000 psi).
- Turn the Product off and remove the mains power cord. Stop for two minutes to let the power assemblies discharge before you open the fuse door.
- Use only specified replacement fuses.
- Do not apply pressures over the rated pressure of any port of the Product.
- Use care when touching the threads of any pressure port as sharp burrs may develop from normal use.

The symbols used in the manuals and on the Product are shown below.

Symbols

Symbol	Description
	WARNING. HAZARDOUS VOLTAGE. Risk of electric shock.
	WARNING.RISK OF DANGER.
	Consult user documentation.
	Certified by CSA Group to North American safety standards.
	Conforms to European Union directives.
	Conforms to relevant Australian EMC standards.
	Fuse
	Conforms to relevant South Korean EMC Standards.
	This product complies with the WEEE Directive marking requirements. The affixed label indicates that you must not discard this electrical/electronic product in domestic household waste. Product Category: With reference to the equipment types in the WEEE Directive Annex I, this product is classed as category 9 "Monitoring and Control Instrumentation" product. Do not dispose of this product as unsorted municipal waste.

Safety Specifications

Power Requirements	100 V ac to 240 V ac, 47 Hz to 63 Hz
Fuse	T2A 250 V ac
Max Power Consumption.....	100 W
Operating Ambient Temperature Range.....	15 °C to 35 °C
Storage Temperature.....	-20 °C to 70 °C
Relative Humidity	
Operating	<80 % to 30 °C, <70 % to 35 °C
Storage	<95 %, non-condensing. A power stabilization period of four days may be required after extended storage at high temperature and humidity.
Vibration.....	MIL-T-28800D CLASS 3
Altitude (Operation).....	<2000 m
Ingress Protection	IEC 60529: IP20
Safety.....	IEC 61010-1, Installation Category II, Pollution degree 2
Warmup Time	15 minutes typical

Electromagnetic Compatibility (EMC)

International	IEC 61326-1: Controlled Electromagnetic Environment CISPR 11: Group 1, Class A <i>Group 1: Equipment has intentionally generated and/or uses conductively- coupled radio frequency energy that is necessary for the internal function of the equipment itself.</i> <i>Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low- voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.</i> <i>Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.</i>
Korea (KCC)	Class A Equipment (Industrial Broadcasting & Communication Equipment) <i>Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.</i>
USA (FCC).....	47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.

LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for one year from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke's behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

Fluke Corporation
P.O. Box 9090
Everett, WA 98206-9090
U.S.A.

Fluke Europe B.V.
P.O. Box 1186
5602 BD Eindhoven
The Netherlands

11/99