

2638A

HYDRA Series III Data Acquisition Unit

Safety Information

Introduction

This document supplies safety information for the 2638A HYDRA Series III Data Acquisition Unit (the Product).

Contact Fluke

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

- Technical Support USA: 1-800-44-FLUKE (1-800-443-5853)
- Calibration/Repair USA: 1-888-99-FLUKE (1-888-993-5853)
- Canada: 1-800-36-FLUKE (1-800-363-5853)
- Europe: +31 402-675-200
- Japan: +81-3-6714-3114
- Singapore: +65-6799-5566
- Anywhere in the world: +1-425-446-5500

Or, visit Fluke's website at www.fluke.com.

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

To view, print, or download the latest manual supplement, visit <http://us.fluke.com/usen/support/manuals>.

Safety Specifications

Mains Voltage

100 V Setting.....	90 V to 110 V
120 V Setting.....	108 V to 132 V
220 V Setting.....	198 V to 242 V
240 V Setting.....	216 V to 264 V

Frequency 47 Hz to 440 Hz

Power Consumption..... 36 VA peak (24 W average)

Relative Humidity (non-condensing)

Operating.....	0 °C to 28 °C <90 %
	28 °C to 40 °C <75 %
	40 °C to 50 °C <45 %
Storage.....	-20 °C to 70 °C <95 %

Environment Temperature

Operating.....	0 °C to 50 °C
Full accuracy	18 °C to 28 °C
Storage.....	-20 °C to 70 °C
Warm-up.....	1 hour to full accuracy specifications

Input Protection

Front Panel.....	300 V CAT II
Rear Panel	150 V CAT II, 250 V rms with maximum transient voltage of 1000 V peak. These terminals are not intended for connection to mains voltage above 150 V without external transient suppression. The maximum input that can be applied between rear-module terminals or between any rear-module terminal and earth ground is 250 V dc or ac rms.

Altitude

Operating.....	<2,000 m
Storage.....	<12,000 m

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.
- Use the Product only as specified, or the protection supplied by the Product can be compromised.
- Examine the case before you use the Product. Look for cracks or missing plastic. Carefully look at the insulation around the terminals.
- Do not use the Product if it operates incorrectly.
- Do not use and disable the Product if it is damaged.
- Use only the mains power cord and connector approved for the voltage and plug configuration in your country and rated for the Product.
- Replace the mains power cord if the insulation is damaged or if the insulation shows signs of wear.
- 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.
- Do not put the Product where access to the mains power cord is blocked.
- Use only correct measurement category (CAT), voltage, and amperage rated probes, test leads, and adapters for the measurement.
- Use only cables with correct voltage ratings.
- Do not use test leads if they are damaged. Examine the test leads for damaged insulation and measure a known voltage.
- Do not exceed the Measurement Category (CAT) rating of the lowest rated individual component of a Product, probe, or accessory.
- Keep fingers behind the finger guards on the probes.
- 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.
- Limit operation to the specified measurement category, voltage, or amperage ratings.
- Measure a known voltage first to make sure that the Product operates correctly.
- Consider all accessible channels to be hazardous live and an electric shock hazard if any channel is connected to a hazardous voltage source.
- Remove inputs from hazardous voltage sources before touching or changing external wiring.
- Remove inputs from hazardous voltage sources before opening an input module.
- Use the correct terminals, function, and range for measurements.
- Use this Product indoors only.
- Do not use the Product around explosive gas, vapor, or in damp or wet environments.

Table 1 shows the symbols used in the manuals and on the Product.

Table 1. Symbols

Symbol	Description
	Risk of danger. Important information. See manual.
	Hazardous voltage. Voltage > 30 V rms, 42 V pk, or 60 V dc might be present.
	AC (Alternating Current).
	DC (Direct Current).
	AC or DC (Alternating or Direct Current)
	Digital signal.
	Power ON / OFF
	Earth ground.
CAT II	Measurement Category II is applicable to test and measuring circuits connected directly to utilization points (socket outlets and similar points) of the low-voltage MAINS installation.
CAT III ^[1]	Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage MAINS installation.
CAT IV ^[1]	Measurement Category IV is applicable to test and measuring circuits connected at the source of the building's low-voltage MAINS installation.
	This product complies with the WEEE Directive (2002/96/EC) 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. Go to Fluke's website for recycling information.
	Recycle.
CE	Product conforms with the requirements of the applicable EC directives.
<p>Note: [1] - This equipment is not intended for measurements in CAT III or CAT IV environments. These definitions are included because the test leads supplied with the product include these ratings.</p>	

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.

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