

2638A

HYDRA Series III Data Acquisition Unit

Safety Information



1-year limited warranty. See the Operators Manual for the full warranty.

Contact Fluke Calibration

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

Introduction

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

Safety Information

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

<u>∧</u> <u>∧</u> 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.

PN 4107841

June 2013 Rev. 1, 5/16

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- 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.

Safety Specifications

Mains Voltage	
100 V Setting	90 V to 110 V
120 V Setting	
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)
Environment Temperature	
Operating	0 °C to 50 °C
Full accuracy	18 °C to 28 °C

specifications

Storage-20 °C to 70 °C Warm-up1 hour to full accuracy

Relative Humidity (non-condensing)				
Operating				
	28 °C to 40 °C <75 %			
	40 °C to 50 °C <45 %			
Storage	20 °C to 70 °C <95 %			
Altitude				
Operating	2 000 m			
Storage				
Otoruge	. 12 000 111			
Safety Protection				
Mains Input	. IEC 61010-1. Overvoltage			
r P	Category II, Pollution Degree 2			
	IEC 61010-2-030: CAT II 300 V IEC 61010-2-030: CAT II 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			

Electromagnetic Compatibility (EMC)

International	IEC 61326-1: Basic
	Electromagnetic Environment
	CISPR 11: Group 1, Class A

250 V dc or ac rms.

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.

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.

Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.

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.

USA (FCC)4	17 CFR 15 subpart B. This
ŗ.	product is considered an
ϵ	exempt device per clause
1	15 103

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

Table 1. Symbols

Symbol	Description	Symbol	Description
Δ	Risk of danger. Important information. See manual.	~	AC (Alternating Current)
A	Hazardous voltage. Voltage >30 V dc or ac peak might be present.		DC (Direct Current)
~ or ∴	AC or DC (Alternating or Direct Current)	Л	Digital signal.
Ŧ	Earth ground.	①	Power ON / OFF
4	Recycle.		Double insulated.
CATI	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	Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage MAINS installation.		
CAT W	Measurement Category IV is applicable to test and measuring circuits connected at the source of the building's low-voltage MAINS installation.		
<u> </u>	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.		
C€	Conforms to European Union directives.		
	Conforms to relevant South Korean EMC Standards.		

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