CableEye® TECHNICAL SPECIFICATIONS

	Low Voltage					Low and High Voltage	
CE	**M2U-B** Item 810U	**M2U** Item 811U	**M3U** Item 821U	**M3UH** Item 821UH	**M4** Item 824	**HVX** Item 829	**HVX-21** Item 829A
Main Unit Test Points	128	152				152 for LV tests 128 for HV tests	
Max Test Points	128	1024	2560	1024	1024	1024	512
Test Time (128 Test Points) Continuity Only With Resistance Test	0.20 s N/A		0.20 s 0.25 s		0.15 s 0.40 s	Depends on voltage, ramp rate, and test algorithm selected	
Resistance Thresholds	46 kΩ, Fixed		0.3 Ω to 10 MΩ	0.1 Ω to 5 MΩ	0.02 Ω to 6 MΩ	0.1 Ω to 1 GΩ	0.1 Ω to 5 GΩ
Resistance Accuracy			2% from 10 Ω to 100 Ω 1% from 100 Ω to 1 MΩ Lesser accuracy over full range.			Same as M3UH under 1 MΩ 5% 1 MΩ to 100 MΩ Lesser accuracy above 100 MΩ	
Resistance Range			M3U: 0.3 Ω to 10 MΩ M3UH: 0.1 Ω to 5 MΩ		0.02 Ω to 6 MΩ	Same as M3UH or M4	
4-Wire Kelvin					20 mΩ ± 20 mΩ, From 20 mΩ to 15 Ω Test Current: 3.3 mA	1 mΩ ± 1 mΩ, From 1 mΩ to 15 Ω Test Current 100 mA to 1 A Optional Feature (Item 832) ■	
Intermittent Connection Scan Rate	33 Scans/s		26 Scans/s - 128 TPs 90 Scans/s - 64 TPs		18 Scans/s - 128 TPs 47 Scans/s - 64 TPs	Same as M3UH or M4	
Diode Measurement	Orientation Only		Orientation, Forward Voltage and Reverse Breakdown <10V			Orientation, Forward Voltage and Reverse Breakdown >10V	
Test Voltage	5 V		10 V		10 V	10 - **1500** Vdc or 10 - **1000** Vac_{rms} in Increments of 1 V	10 - **2100** Vdc or 10 - **1200** Vac_{rms} in Increments of 1 V
Test Voltage Accuracy						DC: ± 2%, ±1.5 V AC: ±4%, ±2 V_{rms}	
Max. Test Current	0.3 mA		1.0 mA	3.3 mA			
Capacitance Range					50 pF - 100 µF		Optional Features for HVX series (Item 833) ■
Capacitance Accuracy					±5%		
Capacitance Meas. Rate					20 Measurements/Sec at 100 nF or less		
Twisted Pair Measurement					Yes, 6′ Minimum Length		
Meas. Cable Length					Minimum Length 6 ft, ±3 ft		
Meas. Distance to Break					Minimum Distance to Break 6 ft, ±3 ft		
Dwell Time Range	1 µs to 100 ms					LV: 1 µs to 100 ms HV: 30 ms - 300 s	
Insulation Resistance Measurement			10 MΩ at 10V	5 MΩ at 10V	6 MΩ at 10V	2 MΩ - 1 GΩ at 1500 Vdc 2 MΩ (min) at 1000 Vac Current Sensitivity: **1 µA**	2 MΩ - 5 GΩ at 2100 Vdc 2 MΩ (min) at 1000 Vac Current Sensitivity: **0.2 µA**
Digital I/Os	Inputs Only	Pairs of Test Points used as Inputs, 50+ Relay Outputs with optional Relay Boards (Item 765) ■					
Calibration	Not Required	Recommended Yearly					
Test Point Connectors	64-pin dual-row headers, 0.1″ (2.54 mm) centers. Two per 128-point module						
Remote Control Socket	No	Yes, MiniDIN8 Connector for use with e.g. Footswitch, External Control Panel					
Probe Socket	No	Yes. Probe included with tester. Accessory port also usable with minihook cables.					
Power Requirement	9 Vdc at 300 mA (max) 3 W, from wall module	18 Vdc at 500 mA (max) 9 W, from wall module or desktop supply			18 Vdc at 500 mA (max), 9 W	100 - 250 Vac, 50-60 Hz 130 W (max) for 128 TPs; 175 W (max) for 512 TPs IEC-standard universal C14 chassis plug	
Weight	2 lbs 6 oz (1.1 kg)	2 lbs 10 oz (1.2 kg)			2 lbs 6 oz (1.1 kG)	21 lbs (9.5 kg)	
Computer Requirements	Any Windows-capable machine running Windows 7 or later. Compatible with touchscreen and laptop PCs.						
USB Interface	USB 1.1, Fast					USB 1.1, Fast, Two Ports	
Environmental Specs	Environmental, EMC, and Safety Specifications: camiresearch.com/environmental-specs.pdf						
Warranty	One year, parts and labor, with free tech support and free software upgrades. Renewable yearly.						

TEST AND MEASUREMENT MATRIX

	LV			HV
	M2U Series	**M3U Series**	**M4**	**HVX Series**
Continuity				
Opens	●	●	●	●
Shorts	●	●	●	●
Miswires	●	●	●	●
Intermittent Faults	●	●	●	●
Complex Networks, Backplanes			●	■
Resistance				
Connection, Non-Connection Quality		●	●	●
Resistance (2-Wire)		●	●	●
Continuous Resistance Scan		●	●	●
Fixture Resistance Nulling		●	●	●
Resistance (4-Wire Kelvin)			●	■
Capacitance				
Wire Length, Cable Length			●	■
Length to Break			●	■
Twist Pairing			●	■
Single Channel Safety Test				
Chassis, Panels, Transformers, etc.				●
Insulation Quality				
Dielectric Strength				●
Dielectric Withstand Voltage (DWV)				●
Insulation Resistance		●	●	●
In-Line Components				
Resistors		●	●	●
Diodes Orientation Forward Voltage	●	● ●	● ●	● ●
LEDs Orientation Color Detection	●	● ●	● ●	● ●
Zener Diodes Orientation Forward Voltage Reverse Breakdown Voltage <10V Reverse Breakdown Voltage >10V	●	● ● ●	● ● ●	● ● ● ●
Capacitors			●	■

Key: ● Standard Feature
■ Optional Feature

Low Voltage Models

High Voltage Models

Automation-Ready Cable and Harness Testers

camiresearch.com/benefits