

CableEye® TECHNICAL SPECIFICATIONS



	Low Voltage				Low and High Voltage	
	M2U-B Item 810U	M2U Item 811U	M3U* Item 821U	M3Z Item 826	M4 Item 824	HVX Item 829
Control Module Test Points	128	128 + 24 Accessory Test Points			128 + 24 Accessory Test Points for LV tests 128 for HV tests	
Max Test Points	128	1024	2560	2560	2560	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	0.15 s 0.40 s	From 0.20 / 0.15 s From 0.25 / 0.40 s	
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 / 0.02 Ω to 1 GΩ	0.1 / 0.02 Ω to 5 GΩ
Resistance Accuracy:					±0.2Ω / ±0.15Ω	
From 10Ω to 100Ω		±0.3Ω	±0.2Ω	±0.15Ω		
From 100Ω to 1MΩ		1%	1%	1%	1 %. 5% from 1 MΩ to 100 MΩ	
Full range		Lesser accuracy over full range.			Lesser accuracy above 100 MΩ	
Resistance Range		0.3 Ω to 10 MΩ	0.1 Ω to 5 MΩ	0.02 Ω to 6 MΩ	0.1 / 0.02 Ω to 5 / 6 MΩ	
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 100mA to 1A Optional Feature (Item 832) ■	
Intermittent Connection Scan Rate	33 Scans/s	90 Scans/s - 64 TPs	18 Scans/s - 128 TPs 47 Scans/s - 64 TPs		90 Scans/s - 64 TPs 47 Scans/s - 64 TPs	
Diode Measurement	Orientation Only	Orientation, Forward Voltage and Reverse Breakdown <10V			Orientation, Forward Voltage and Reverse Breakdown >10V	
Test Voltage	5 V	10 V	Adjustable: 1.7 V, 2.5 V, 3.3 V, 5 V, 10 V		10 - 1500Vdc or 10 - 1000Vac _{rms} in Increments of 1V	10 - 2100Vdc or 10 - 1200Vac _{rms} in Increments of 1V
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					100 pF - 100 μF	
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 1500Vdc 2 MΩ (min) at 1000Vac Current Sensitivity: 1 μA	2 MΩ - 5 GΩ at 2100Vdc 2 MΩ (min) at 1200Vac 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	9Vdc at 300 mA (max) 3W, from wall module	18Vdc at 500 mA (max) 9W, from wall module or desktop supply	18 Vdc at 500 mA (max), 9 W	100 - 250Vac, 50-60Hz 130W (max) for 128 TPs; 175W (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: camiresearch.com/warranty					

Values in blue text for HVX Advanced Measurement Option Installed (Item 833)

*M3U has been superseded by the M3Z

TEST AND MEASUREMENT MATRIX

	LV			HV
	M2 Series	M3Z	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)			●	■
High Current Resistance			●	■
Capacitance				
Wire Length, Cable Length			●	■
Length to Break			●	■
Twist Pairing			●	■
Single Channel Safety Test				
Chassis, Panels, Transformers, etc.				●
Insulation Quality				
Dielectric Strength, Withstand Voltage				●
Insulation Resistance		●	●	●
Presence of Contaminants				●
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