# Logic & Pulser **Probes**

# **DIGITAL TERMS**

CLOCK—A pulse waveform used to synchronize the timing of digital or switching circuits.

**COMPARATIVE TESTING**—Evaluation of a component by comparing its performance to that of a properly functioning component.

**DIGITAL SIGNAL**—A discrete signal that assumes one of two states: high or low.

TTL—Transistor logic defines a type of digital circuit. It is characterized by a high digital signal state above 2.4 VDC, and low digital states below 0.8 VDC. Operating voltage is typically 5 VDC.

**CMOS**—Complementary Metal Oxide Semiconductor defines another type of digital circuit. It is characterized by a variable operating voltage of 3 to 18 V, and logic levels proportional to that operating voltage (typically 1.5 V low and 3.5 V high @ 5 V supply).

CMOS circuits are characterized by high noise immunity. IN-CIRCUIT TESTING—Evaluating the functioning of a component without removing the component from the circuit in which it is being used.

Specificati	ons	
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	DP-31A
Pulse Repetition Rate	0.5 pps/400 pps
Pulse width at 100 mA load	10ms
Output Current	Pulser mode-100mA sink/source
	square wave mode-5 mA sink/source
Operating Supply	
Voltage Range	5-15 V
Sync Input Impedance	Ι ΜΩ
Sync Input Protection	+120 V30 sec.
Power Supply Protection	+25 V/15 sec.
Output Protection	+35 V/15 sec.
Operating Temperature	32° to 122°F (0-50°C) < 80% R.H/
Storage Temperature	$-4^{\circ}$ to $149^{\circ}$ F (-20° to +65°C), < 80% RH
Dimensions	0.7 x 0.7 x 8.2" (18 x 18 x 210mm)
Weight	1.4 oz. (40g)
	One Vear Warranty

#### Specifications models **DP-21** DP-52 INPUT CHARACTERISTICS DC to 20MHz DC to 50MHz Frequency response Minimum detectable pulse width 30nS I OnS LOGIC THRESHOLD 2.3V +0.2V 3.0V +0.25V TTL Logic 1 threshold (Red LED) 0.75V +0.25V TTL Logic 0 threshold (Green LED) 0.8V + 0.2VTTL CMOS I threshold (Red LED) 70% Vcc +10% 40% Vcc +5% TTL CMOS 0 threshold (Green LED) 30% Vcc +10% 15% Vcc +5% PULSING Yellow LED Both Red and Green INPUT OVERLOAD PROTECTION +220Vac/DC (15 sec.) +70Vac/DC (15 sec.) INPUT IMPEDANCE 120kΩ GENERAL Power supply protection +20V Operating supply voltage -4° to 149°F (-20° to 65°C) <80% RH Storage temperature 32° to 122°F (0-50°C) <80% RH Operating temperature Dimensions (HxWxD) 0.7 x 0.7 x 8.2" (18 x 18 x 20mm) 1.6oz. (45g)

### Model DP-21

20 MHz Logic Probe

- Tests TTL, and CMOS
- Displays pulse presence and logic states
- Memory mode "freezes" pulse display
- Catches pulses to 30ns or pulse trains to 20MHz
- I  $M\Omega$  input impedance



#### Model DP-52 50 MHz Logic Probe

- Tests TTL and CMOS
- Displays DC to 50 MHz
- Detects 10ns pulse width
- Overload protected

# Model DP-31A

**Pulser Probe** 

- For TTL, and CMOS
- Produces 10mS pulse signal at I00mA
- **■** External square wave terminal
- **■** Sync input point



One Year Warranty



**DP-31A** 

DP-52

# AMEYA360 Components Supply Platform

# **Authorized Distribution Brand:**

























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