

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.

| Specifications | | model |
|--------------------------------|--|-------|
| | 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 | 1 MΩ | |
| Sync Input Protection | +120 V/30 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° to 149°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 Year Warranty

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

One Year Warranty

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
- 1 MΩ input impedance



DP-21

Model DP-52 50 MHz Logic Probe

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



DP-52

Model DP-31A Pulser Probe

- For TTL, and CMOS
- Produces 10ms pulse signal at 100mA
- External square wave terminal
- Sync input point



DP-31A

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Test Probes](#) category:

Click to view products by [B&K Precision](#) manufacturer:

Other Similar products are found below :

[6214](#) [6474](#) [815003](#) [923832-BK-B](#) [P-KIT-1](#) [KT-MS001](#) [925250-R](#) [973368101](#) [972318101](#) [972318100](#) [MXHQ87WJ3000](#) [PK106-3](#) [PK2-5MM-102](#) [TAS90](#) [VL1735/45](#) [973368100](#) [972327100](#) [972327101](#) [973995100](#) [973995101](#) [CT3982B-120](#) [MO50-PINS](#) [CT4386](#) [PP023-1](#) [PK1-5MM-127](#) [PP026-1](#) [PK103](#) [PK-ZS-013](#) [P6139B-PK10](#) [PQ215](#) [PQ218](#) [RT-ZI10C](#) [TT-SI 8071](#) [TT-SI 8050](#) [TT-SI 8010A](#) [TT-SI 7005](#) [GE.3421](#) [GE.2521](#) [GE.3121](#) [GE.1511](#) [GE.1521](#) [GE.2511](#) [GE.4511](#) [HVP15B](#) [TT-SI7002](#) [4005](#) [4011](#) [4012](#) [4013](#) [4014](#)