TekVPI™ Interface Adapter

TPA-BNC Data Sheet

Features & Benefits

- Enables Existing TekProbe® Products to Connect to the TekVPI™ Probe Interface of the New DPO7000 and DPO4000 Series Oscilloscopes
- An Easy-to-use Plug-in Adapter to the Oscilloscope's TekVPI Interface
- Provides Necessary Power, Communication, and Offset Control as Needed by the Attached TekProbe Product
- Provides Overcurrent and Thermal Overload Protection for the Attached TekProbe Product
- Provides an LED Probe Status Indicator which Identifies that the Probe has Powered-up Successfully

Applications

- Adapts Existing TekProbe® Probe Types for Application with TekVPI™ Oscilloscopes

TekVPI™ Interface Adapter

TPA-BNC Adapter enables existing TekProbe® interface products (active, differential, high-voltage, current, and optical probes) to be used with Tektronix' newest generation of DPO7000 and DPO4000 Series Oscilloscopes which feature the new TekVPI™ probe interface architecture. Existing TekProbe-BNC probe types simply plug into the TPA-BNC adapter which is then plugged directly into any TekVPI probe channel of the DPO7000 and DPO4000 Series oscilloscopes. The TPA-BNC adapter recognizes and supplies the necessary power and serial communication and offset control as used by the connected TekProbe product accessory.

Note: Tektronix probe types using a BNC connection, or a BNC connection with a single analog encoding pin for attenuation factor detection connect directly to the oscilloscope's TekVPI probe interface and do not require a TPA-BNC adapter.

TekProbe® Interface

TekProbe is a probe interface architecture introduced in 1986, and used on many earlier models of Tektronix oscilloscopes including the TDS300, TDS400, TDS500, TDS600, TDS700, TDS3000/B, TDS5000/B, and TDS7000 Series. In addition to coupling the signal from the probe to the oscilloscope, the TekProbe interface provides power and offset control to active probes. It also allows the oscilloscope to sense the probe's attenuation scale factor and/or probe type.

Tektronix®

Characteristics

Bandwidth – DC to >3 GHz.
VSWR – <1.23:1 up to 3 GHz.
RF Insertion Loss – <0.25 dB.
Delay Time – 245 ps.
Maximum Input Signal Voltage – 42 $V_{pk\text{-}pk}$, 30 V_{RMS}, 60 VDC.

Physical Characteristics

Dimensions	mm	in.
Height	43	1.694
Width	30.5	1.200
Length	62.2	2.449
Weight	**kg**	**lb.**
Shipping	0.45	1

Power Requirements

TPA-BNC is powered directly from DPO7000 and DPO4000 Series Oscilloscopes, using TekVPI probe interface.

Environmental

Temperature

Operating – 0 °C to +50 °C.
Nonoperating – -40 °C to +75 °C.

Humidity

Operating – 5% to 95% Relative Humidity (RH) up to +30 °C; 5% to 85% RH above +30 °C up to +50 °C, noncondensing.
Nonoperating – 5% to 95% Relative Humidity (RH) up to +30 °C; 5% to 85% RH above +30 °C up to +75 °C, noncondensing.

Altitude

Operating – Up to 3,000 m (10,000 ft.).
Nonoperating – Up to 15,240 m (50,000 ft.).

Regulatory

Compliance Labeling – WEEE (European Union).

Standard Warranty

One year parts and labor.

Recommended Oscilloscopes

DPO7000 and DPO4000 Series Oscilloscopes with TekVPI probe interface.

Ordering Information

TPA-BNC

TekVPI™ Interface Adapter to TekProbe-BNC Probes

Includes: User manual (071-1689-xx).

Service Options

Opt. C3 – Calibration Service 3 years (initial certification, plus 2 calibrations).

Opt. C5 – Calibration Service 5 years (initial certification, plus 4 calibrations).

Opt. D3 – Test Data on delivery and with future calibrations. Must be ordered with Opt. C3.

Opt. D5 – Test Data on delivery and with future calibrations. Must be ordered with Opt. C5.

Opt. R3 – Repair Service. Repair warranty extended to cover 3 years.

Opt. R5 – Repair Service. Repair warranty extended to cover 3 years.

ISO 9001 Product(s) are manufactured in ISO registered facilities.

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For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit **www.tektronix.com**

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