

# TekVPI™ Interface Adapter

## ► TPA-BNC



## 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, TDS3000B, TDS5000B 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.

## ► 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-on Adapter to the Oscilloscope's TekVPI Interface

Provides Necessary Power, Communication and Offset Control as Needed by the Attached TekProbe Product

Provides Over-current 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

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## ▶ 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<sub>pk-pk</sub>, 30 V<sub>RMS</sub>, 60 VDC.

### Physical Characteristics

Dimensions	mm	in.
Height	43	1.694
Width	30.5	1.200
Length	62.2	2.449
Weight	kg	lbs.
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.

**Non-Operating** – -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,

non-condensing.

##### Non-Operating –

5% to 95% Relative Humidity (RH) up to +30 °C;

5% to 85% RH above +30 °C up to +75 °C,

non-condensing.

#### Altitude

**Operating** – Up to 3,000 m (10,000 feet).

**Non-Operating** – Up to 15,240 m (50,000 feet).

#### 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.

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Updated 15 June 2005

Our most up-to-date product information is available at:  
[www.tektronix.com](http://www.tektronix.com)

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in ISO registered facilities.



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12/05 HB/WWW

51W-19077-1

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