

## TEKTRONIX

# TPA-BNC

The Tektronix TPA-BNC is a TekVPI™ to TekProbe™-BNC (Level II) interface adapter designed to allow classic TekProbe active, differential, and current probes to connect seamlessly to modern oscilloscopes equipped with the TekVPI probe interface. It provides necessary power, analog signal routing, and digital communication, ensuring that legacy probe investments can be leveraged in modern test setups with zero performance degradation.

## SPECIFICATIONS

### General

|                      |                                               |
|----------------------|-----------------------------------------------|
| Interfaces           | TekVPI (Host), TekProbe-BNC Level II (Device) |
| Display              | LED status indicator                          |
| Cooling              | Convection                                    |
| Standard Accessories | Instruction Manual                            |

### Physical

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| Power Supply          | Powered directly from host TekVPI oscilloscope interface |
| Operating Temperature | 0 to +50 °C °C                                           |
| Dimensions (W×H×D)    | 32 mm × 33 mm × 84 mm mm                                 |
| Weight                | 45 g (1.6 oz) kg                                         |
| Shipping Weight       | 0.45 kg                                                  |

### General Description & Compatibility

|                                |                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------|
| Host Interface Type            | TekVPI                                                                                                       |
| Device Interface Type          | TekProbe-BNC (Level II)                                                                                      |
| Compatible Oscilloscope Series | Tektronix MSO/DPO3000, MSO/DPO4000, MDO3000, MDO4000, MSO/DPO5000, DPO7000, and newer TekVPI-equipped models |
| Supported Probe Models         | P6205, P6243, P6245, P6246, P6247, P6248, P6251, P6330, TCP202, P5205, P5210, ADA400A                        |
| Probe Detection Method         | Automatic probe identification and scaling on connection                                                     |
| Bi-directional Communication   | Supported (passes calibration, offset, and scale factors)                                                    |

### Electrical Performance

|                       |                                                                 |
|-----------------------|-----------------------------------------------------------------|
| Bandwidth             | DC to 4 GHz                                                     |
| Propagation Delay     | 245 ps                                                          |
| Signal Attenuation    | 1:1                                                             |
| Maximum Input Voltage | Limited by the attached probe or host oscilloscope input rating |

## Power Requirements

|                         |                                                              |
|-------------------------|--------------------------------------------------------------|
| Power Source            | Directly from host oscilloscope TekVPI interface             |
| Power Provided to Probe | Standard TekProbe Level II voltages ( $\pm 15$ V, $\pm 5$ V) |

## Physical Characteristics

|                       |                                                                                    |
|-----------------------|------------------------------------------------------------------------------------|
| Form Factor           | Compact external interface adapter                                                 |
| Enclosure Material    | Molded plastic                                                                     |
| Input Connector Type  | TekProbe BNC (Level II) female                                                     |
| Output Connector Type | TekVPI custom interface male                                                       |
| Locking Mechanism     | Latch release push-button                                                          |
| Status Indicator      | Single multi-color LED (Green: normal operation, Amber: unsupported configuration) |

## Environmental Specifications

|                             |                                                                |
|-----------------------------|----------------------------------------------------------------|
| Operating Temperature Range | 0 °C to +50 °C                                                 |
| Storage Temperature Range   | -40 °C to +71 °C                                               |
| Operating Humidity Range    | 5% to 95% RH up to +30 °C; 5% to 75% RH above +30 °C to +50 °C |
| Storage Humidity Range      | 5% to 90% RH up to +30 °C; 5% to 85% RH above +30 °C to +71 °C |
| Operating Altitude          | Up to 3,000 m (10,000 ft)                                      |
| Non-Operating Altitude      | Up to 15,240 m (50,000 ft)                                     |

## Compliance & Certifications

|                |     |
|----------------|-----|
| RoHS Compliant | Yes |
| CE Marking     | Yes |

## Ordering & Support Information

|                          |        |
|--------------------------|--------|
| Standard Warranty Period | 1 Year |
|--------------------------|--------|

## Compatibility

|                                           |                                                                                                |
|-------------------------------------------|------------------------------------------------------------------------------------------------|
| Minimum Oscilloscope Firmware Requirement | DPO4000/MSO4000: v1.06 or higher; DPO7000: v2.0.0 or higher; DPO70000/DSA70000: v3.0 or higher |
|-------------------------------------------|------------------------------------------------------------------------------------------------|

## Environmental

|                         |                                                         |
|-------------------------|---------------------------------------------------------|
| Pollution Degree        | 2                                                       |
| Operating Vibration     | 0.31 g RMS, 5 Hz to 500 Hz, 10 minutes per axis, 3 axes |
| Non-Operating Vibration | 2.46 g RMS, 5 Hz to 500 Hz, 10 minutes per axis, 3 axes |

## Compliance

|                |                                                     |
|----------------|-----------------------------------------------------|
| EMC Compliance | EN 61326-1, EN 61326-2-1, EMC Directive 2004/108/EC |
|----------------|-----------------------------------------------------|

## Software & Control

|                     |                            |
|---------------------|----------------------------|
| Firmware Upgradable | Yes, via host oscilloscope |
|---------------------|----------------------------|

## TECHNOLOGY

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Probe Interface Adapter

## APPLICATIONS

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Adapting TekProbe Level II active probes to TekVPI oscilloscopes

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Generated by SpecAtlasHub ([specatlashub.com](https://specatlashub.com)). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.