

## 50 $\Omega$ TekVPI to TekConnect Probe Adapter

### TCA-VPI50 Datasheet



#### Features and benefits

- Use 50  $\Omega$  TekVPI Probes on DPO/DSA/MSO70000 Series Oscilloscopes
- Bandwidth – DC to 4 GHz
- 50  $\Omega$  Input (Only)

#### Applications

- High-speed Digital Systems Design
- Component Design and Characterization
- Manufacturing Engineering and Test
- Educational Research
- Design, Validation, Debugging, and Characterization of Common High-speed Serial Bus Designs
- Signal Integrity, Jitter, and Timing Analysis
- Manufacturing Engineering and Test

### Expand the functionality of Tektronix high-performance oscilloscopes

The TCA-VPI50 adapter extends the functionality of the TCA Series of adapters by enabling 50  $\Omega$  TekVPI probes to be used on oscilloscopes with TekConnect interfaces. The TekVPI interface is used on bench and performance oscilloscopes from 100 MHz up to 3.5 GHz, and until now, TekVPI probes could only be used on oscilloscopes that have a TekVPI Probe Interface. The TCA-VPI50 will only work with 50  $\Omega$  terminated probes. It will not work with 1 M $\Omega$  terminated probes, examples of which are passive probes, current probes, and most high-voltage probes.

## Specifications

All specifications are typical unless noted otherwise. All specifications apply to all models unless noted otherwise.

### Characteristics

Bandwidth (-3 dB)	DC to 4 GHz (Adapter Only)
Input Resistance at DC	50 $\Omega$
Propagation Delay (Input-to-Output)	<300 ps
VSWR (Return Loss)	1.15 max
RF Insertion Loss	0.25 dB max (Adapter Only)
RMS Noise	Refer to Host Instrument Specification
Maximum Input Voltage	Refer to Host Instrument Specification
Inputs	1 (TekVPI 50 $\Omega$ )

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### Supported Oscilloscopes

- DPO/DSA/MSO70000 with Windows 7 64-bit FW V6.2.0

### Supported Probes

- TekVPI 50  $\Omega$ 
  - TIVH02/TIVH02L/TIVH05/TIVH05L/TIVM1/TIVM1L/TIVH08/TIVH08L
  - TAP1500/TAP2500/TAP3500/TAP4000
  - TDP0500/ TDP1000/TDP1500/TDP3500/TDP4000
- TekVPI 1 M $\Omega$  probes are not supported

## Ordering information

TCA-VPI50

TekConnect-to-TekVPI 50  $\Omega$  Adapter.

## Service options

Opt. C3	Calibration Service 3 Years
Opt. C5	Calibration Service 5 Years
Opt. CA1	Single Calibration or Functional Verification
Opt. R3	Repair Service 3 Years (including warranty)
Opt. R5	Repair Service 5 Years (including warranty)
Opt. SILV200	Standard warranty extended to 5 years

### Additional Service Products Available During Warranty (DW) or Post Warranty (PW)

TCA-VPI50-CA1	Provides a single calibration event or coverage
TCA-VPI50-R1PW	Repair Service Coverage 1 Year Post Warranty
TCA-VPI50-R2PW	Repair Service Coverage 2 Years Post Warranty
TCA-VPI50-R3DW	Repair Service Coverage 3 Years (includes product warranty period). 3-year period starts at time of customer instrument purchase
TCA-VPI50-R5DW	Repair Service Coverage 5 Years (includes product warranty period). 5-year period starts at time of customer instrument purchase



Tektronix is ISO 14001:2015 and ISO 9001:2015 certified by DEKRA.

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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.tek.com](http://www.tek.com).

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