

## TekScope™ 分析产品技术资料

随时随地分析数据



TekScope 把示波器分析环境的处理能力带到电脑中。用户可以在实验室外灵活地执行各种分析任务，包括串行解码、功率分析及定时、眼图和抖动分析。您可以在任何地方继续进行示波器中的会话，分享结果。在您需要更深入挖掘或分享数据时，您不用再查看一大堆截屏。如果您想重做测量，可以把会话重新加载到 4/5/6 系示波器上。

您可以在项目组成员和远程站点之间共享泰克 4/5/6 系 MSO、5LP/6LPD 系列 MSO 会话中的波形数据和设置，以及 3 系 MDO、DPO/MSO/MDO3000、DPO/MSO/MDO4000、DPO7000C 或 DPO/MSO70000C/D/DX/SX 系列示波器的波形数据，改善工作效率。

### 主要特点

#### ● 协同

- TekScope 在电脑上运行：提高时间和资源利用率，独立于示波器硬件查看、测量和分析实验室中捕获的数据。
- 兼容最常用的保存 / 调用波形文件：支持常用分析工具，独立于硬件采集，包括：
  - .tss (4/5/6 系会话文件 – 设置和波形)
  - .wfm, .isf (泰克)
  - .bin (Keysight)
  - .trc (力科)
  - .tr0 (Spice)
  - .csv (通用)

#### ● 分析

- 光标：波形，V Bars，H Bars，V&H Bars
- 测量：34 种标准测量
- 示图：时间趋势，直方图，频谱，XY，XYZ
- 数学：基础波形代数，FFT，高级公式编辑器
- 搜索：根据指定标准在数据中快速查找事件
- 带时钟 / 不带时钟的并行总线解码
- 多台示波器分析：远程连接多台示波器，同时查看和分析来自多条通道的实时数据。连接最多 4 台示波器和 32 条通道。
- 低速协议解码：支持所有常用嵌入式协议、汽车协议、航空协议、消费者协议和音频协议的协议解码和搜索分析。
- 高级抖动测量和眼图分析
- 功率电子分析：
  - 高级功率分析
  - 磁性分析
  - 逆变器马达驱动器分析
- 功率完整性分析：
  - 数字功率管理
  - SPMI 串行解码和搜索
  - SpectrumView 分析：同时执行时域和频域分析。
  - 简便接入远程示波器：使用 TekScope 从示波器远程拉取数据，执行离线测量和分析。

#### ● 存档

- 波形和示图标注：共享详细分析结果；测量、异常项目和关心的点供未来参考，与供应商协作，与项目组沟通。
- 报告：简便归档测量结果和配置细节及详细的测试报告。
- 自定义显示配置：多个配置中对示图进行分组，包括堆叠或叠加的波形视图。

### 应用和用途

- 离线分析：在任何时间从任何位置分析波形文件，改善工作效率，无需连接互联网或内联网。

- **实时分析：**远程连接最新、最现代泰克示波器，直接从示波器中实时采集数据。节约时间，减少不必要地来回跑实验室，因为在桌面时、在家里时、在旅行时数据都在手边。
- **多台示波器分析：**在同一个屏幕上查看和分析来自多台示波器的数据。重新排列通道信息，堆叠群组，缩放，在无缝的界面中添加光标或测量。提高查看更高通道数量的能力，所有这些都集中在一个视图中实现，加快分析效率。
- **数据共享：**在分布在不同地方的项目组成员或供应商之间共享波形、测量和配置细节，找到问题的根源。深入挖掘实际数据，而不是使用静态截屏及靠眼睛看图。
- **增强测量和分析选项：**并不是每台示波器都有最新最现代的软件选项。TekScope 可以利用我们屡获大奖的 4/5/6 系用户界面和软件选项，不仅可以应用到任何泰克示波器，而且还可以应用到大多数竞争对手的示波器。

## TekScope 概述

当今系统变得越来越复杂，项目组越来越多地分散到不同地域、不同专业职能领域、甚至是合作伙伴和供应商。随着许多工程师移动到示波器以外的环境中，TekScope 允许工程师高效地处理、分析和共享数据，而不必靠近示波器实体或就在测试环境实体里。TekScope 软件可以与日常工具一起简便运行，加快关联和获得信息的速度。您可以轻松共享数据，能够在实验室以外的地方运行测量，利用各种方式把实验室测量与仿真结果关联起来。

**协同** – TekScope 在电脑上运行，可以分析实验室中捕获的数据。会话可以简便地保存在泰克示波器上，在任何给定时间调用。除泰克波形外，还支持其他文件格式，包括 .wfm、.isf、.tss、.bin、.trc、.csv 和 .tr0，实现关联。

**分析** – TekScope 上执行的测量与 4/5/6 系泰克示波器使用共同的测量库，可以关联结果。TekScope 支持各种测量，包括功率、抖动和眼图测量。可以定制示图，并与缩放和光标控制功能交互，允许共享自定义视图。

**存档** – 结果和视图可以保存为会话文件并归档，供以后使用，或发送给同事或供应商进行调试。结果还可以使用报告生成器归档和保存为 .pdf 或 .mht 格式。可以定制报告，包括关心的信息，如：配置细节，测量结果，示图。还可以把示图和测量数据保存为 .csv 格式的文件，在外部应用中归档或进行数据分析。

## 协同和设置共享

您可以简便地共享示波器上采集的数据，用于 TekScope，只需保存 4/5/6 系会话，在应用中调用就可以了。还可以使用 TekScope 应用，加载任何泰克示波器上捕获的波形。

## 改进工作流程

4/5/6 系示波器的会话可以改进您的工作流程。您可以在 TekScope 中简便地调用示波器保存的会话，进一步进行分析和标注。使用 TekScope 讲数据故事，可以比静态图片（如截屏）讲得更清楚。通过 4/5/6 系示波器，您还可以改变设置，在示波器上还原会话，恢复到离开的位置，而不必从头重新配置示波器。

## 分析

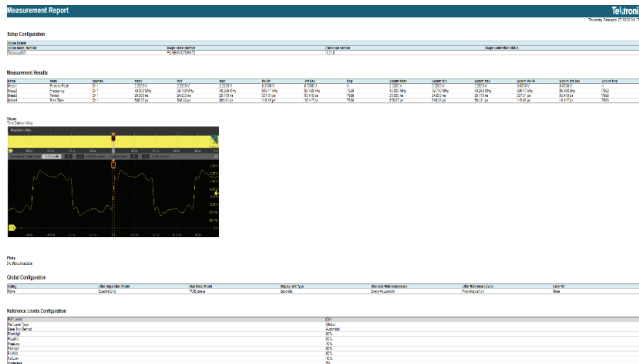
您可以在捕获数据后开始添加标注、测量、解码和示图，把示波器省出来给同事，在桌旁、甚至在家里舒服地工作。通过在想要的时候添加分析，您的数据故事可以比只靠静态截屏更灵活地创建幻灯片演示。后期分析可以返回捕获后的地方复核结果，而不必再次设置示波器。在需要重新测量时，您不必从头开始，而只需重新在 4/5/6 系 MSO 上加载会话文件，然后加载所需的设置变化，迅速恢复工作。

## 测量

大多数示波器只测量波形的第一个周期。TekScope 测量系统允许在记录中所有发生时点上进行测量，这是一种改进，提高了对所有其他波形和所有其他示波器数据的洞察力。如果想收集测量统计数据，您可以从单个波形生成统计数据，而不要求多个波形。我们的 Help 帮助系统还编制了清楚的测量算法文件，确保您对测量结果的信心。

## 编制数据归档报告

在分析结束后，会生成报告，实现共享或归档。有多种选项，包括能够包括示图或配置细节，用户可以指定报告中包含的信息。报告可以归档为 .mht 或 .pdf 文件。



完整的测试报告包括设置细节、测量配置和结果及示图。

## 在实验室或仿真结果之间关联波形

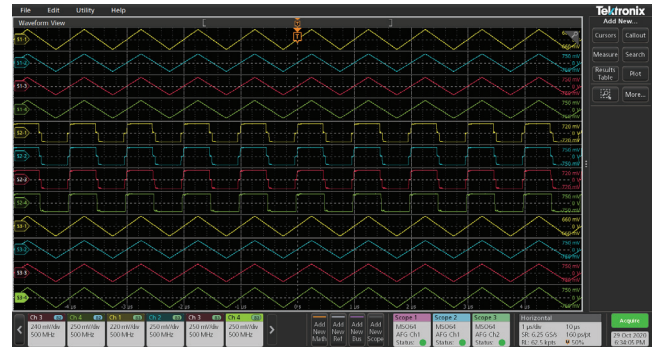
在进行实验室测量时经常出现一个问题，就是仪器和仿真之间的关联问题。出现的差异与测量算法差异有关。TekScope 允许用户从不同来源导入多种波形格式，包括 .wfm、.isf、.tss、.csv、.bin、.trc 和 .tr0，允许使用常用的分析工具，消除由于分析工具不同而导致的差异。例如，用户可以同步比较实验室中捕获的波形与仿真的波形或不同示波器上捕获的波形的眼图张开程度。

## 多台示波器远程分析

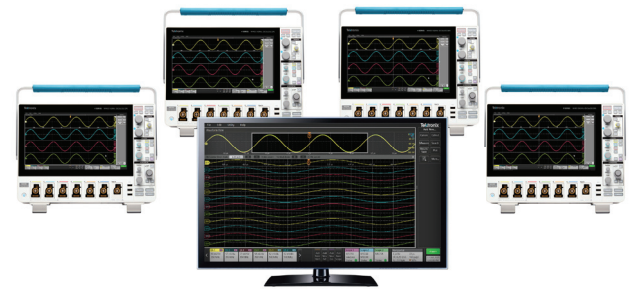
开发要求多条示波器通道的测试应用，有时来自两台或两台以上的示波器，可能会带来明显的可行性挑战，要求更多的开发工作和更长的产品开发周期。您现在可以在测试环境中增加更多的通道，同时把多台示波器系统设置成就像一台示波器一样操作，节省分析不同示波器多条通道及试图同步所有这些通道所需的大量时间。

可以在相同的屏幕上查看和分析来自多台示波器的数据，在无缝的界面中重新排列通道信息，堆叠群组，缩放，添加光标或测量。这种功能支持最多 4 台示波器和 32 条通道。

多台示波器分析解决方案可以同时远程控制所有示波器上的采集设置，而不需单独设置每台示波器。它提供了一种方式，可以在多条通道中以高分辨率同时捕获非常快的毛刺。一旦 TekScope 上采集和捕获了数据，您可以立刻在不同示波器的所有通道中运行测量，分析数据。



同时对 12 条通道执行三台示波器远程分析



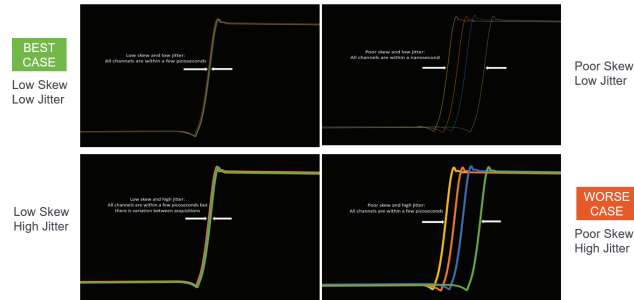
多台示波器解决方案 – 控制最多 4 台示波器，变成一台虚拟的 32 通道仪器。

## 数据传送模式

1. 简单地传送数据，而不会触发远程示波器 – 得到示波器上看到的東西。  
[ 使用 **Refresh Waveforms** 按钮 ]。
2. 触发远程示波器，采集新的波形数据。触发 / 水平 / 垂直设置通过 TekScope 来控制。  
[ 使用 **Utility > I/O > TekScope Remote Control** 按钮，设置成 **ON**，使用 **Acquire** 按钮采集数据 ]
3. 触发远程示波器，采集新的波形数据。触发 / 水平 / 垂直设置不由 TekScope 控制，而是 TekScope 使用每台示波器上本地配置的设置。  
[ 使用 **Utility > I/O > TekScope Remote Control** 按钮，设置成 **OFF**，使用 **Acquire** 按钮采集数据 ]

## 同步多台仪器的通道

为使多台示波器分析解决方案实现最高精度，最好把仪器设置成所有通道都能严格同步，时延较少。时延是仪器通道与完美理想对准之间的时间差。校正时延可以消除不同形式的误差，如抖动、增量时间精度和电缆延迟。可以通过多种方式获得通道时延数据。



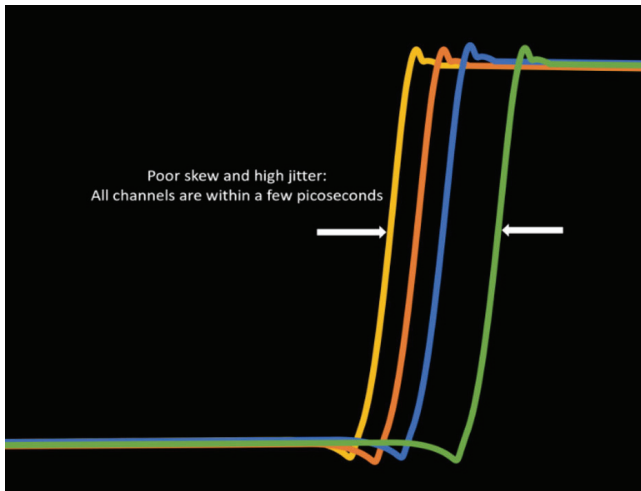
多条通道间时延实例。

由于来自不同示波器的通道之间的时间关联依赖仪器设置，所以我们可以使用简便设置在所有通道间实现 350 ps 时延，使用涉及更多步骤的设置实现 <50 ps 时延。下面是两种边沿实例：

### 350 ps 时延实例

简便设置

1. 把匹配的相位电缆插到 Aux 输入中。
2. 设置 Aux 输入进行触发。



使用简便设置演示通道间的时延。

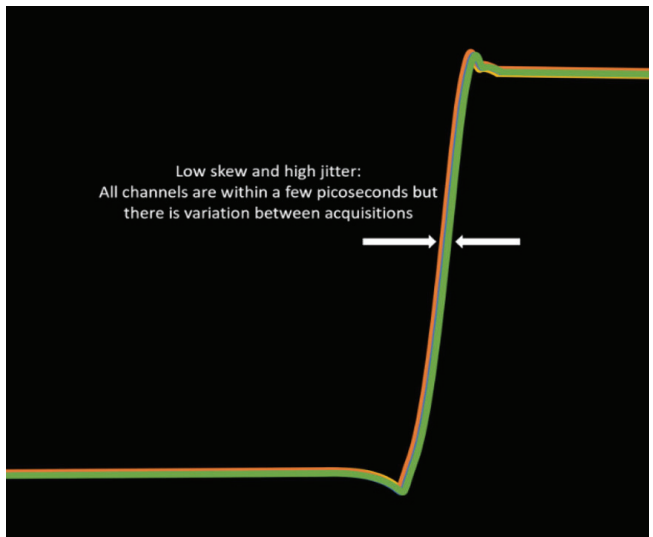


在通道间迅速实现适量时延的设置图。

### <50 ps 时延实例

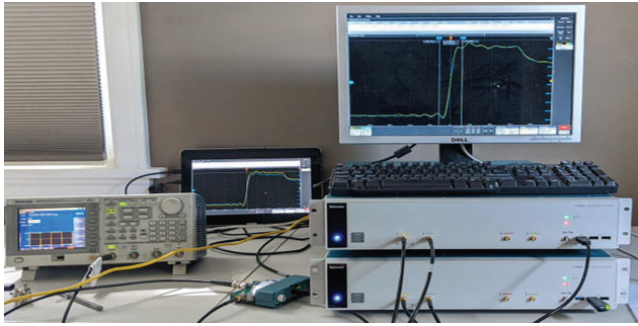
最佳性能设置

1. 使用匹配的同步电缆。
2. 使用 CH<x> 进行触发 (而不是辅助输入)。
3. 校正每条通道的时延触发输入。
4. 如果捕获时间 >2μs, 使用参考时钟同步电缆连接不同的仪器。
5. 测量并验证来自所有通道的时延量。



演示不同示波器的通道之间的低时延。





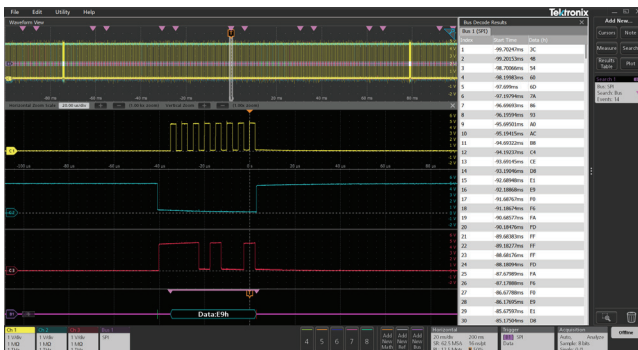
实现最佳时延性能的设置实例。

您可以观看视频，进一步了解多台示波器分析。

- 多台示波器分析 24 通道实例可参见：[www.tek.com/video/tekscope-multi-scope-analysis](http://www.tek.com/video/tekscope-multi-scope-analysis)
- 如果想进一步了解怎样在 TekScope 上设置多台示波器分析，请参阅：[www.tek.com/video/how-to-set-up-multi-scopeanalysis-on-tekscope-pc-software%20](http://www.tek.com/video/how-to-set-up-multi-scopeanalysis-on-tekscope-pc-software%20)

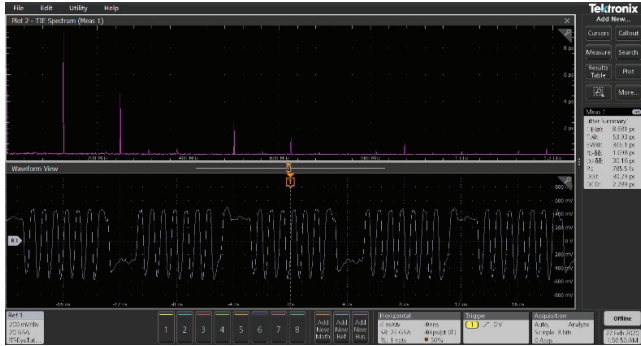
### 串行协议解码和分析

通过串行协议解码工具，迅速解码和搜索波形结果，增强生产效率。快速识别错误或把控制结果与其他行为关联起来，加快识别和解决系统问题的能力。

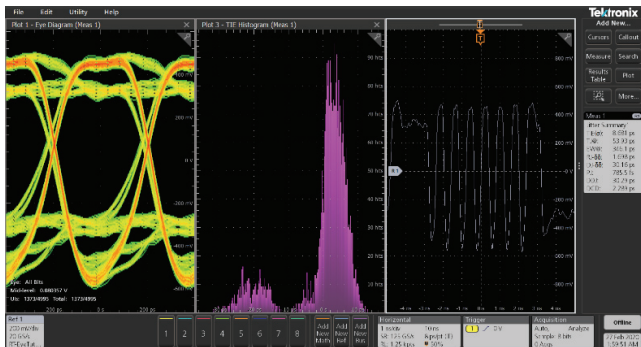


示一组示图。在一组示图内部，用户可以在显示画面内部缩放示图，灵活地定制布局。例如，如下图所示，在查看波形的抖动频谱或 FFT 时，最好使用堆叠视图。

您还可以获得并排视图。



时域波形和抖动频谱的堆叠视图。



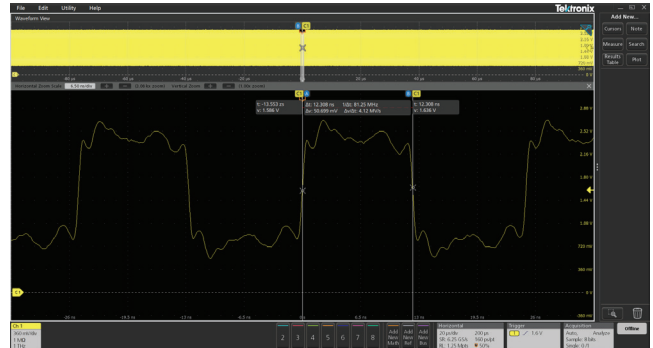
单独视图显示的眼图、TIE 直方图和波形的并排视图。

在一个显示画面不足以查看必要的示图时，它们可以迅速分组，传送到第二台监视器。一旦分组，用户可以灵活地定制布局，并能够在标签或网格模式下查看示图。标签模式提供了各个示图的最大化视图，同时允许点击其他标签，在不同示图之间切换。网格模式则提供了单个视图，包括一组中的所有示图。

### 波形缩放和光标

使用缩放和光标实现交互示图 – 示图可以深入了解系统行为。我们经常想放大示图数据，放大示图的常见原因之一，是放置光标获得精确位置的测量数据。放大后，我们可以精确查看关心的示图部分。在放大概况窗口的同时，它会一直提供被放大区域与整个示图的关系。

光标支持示图和波形可以提供额外的测量细节。例如，可以使用光标确定波形的幅度和周期，还可以通过评估趋势图，确定测量结果偏差。



光标测量及显眼的读数为示图和波形数据提供快速结果。

### 主要功能

TekScope 有三种许可层级，以满足您的需求。下表汇总了 TekScope 提供的核心功能。

<b>初级用户许可</b>
查看和标注的波形和示图没有数量上限
波形和示图缩放
在堆叠或重叠模式下查看
光标：波形，V Bars，H Bars，V&H Bars
34 种幅度和定时测量及统计数据
数学：基础波形代数，FFT，公式编辑器
示图：时间趋势，直方图，频谱，XY/XYZ
搜索：根据指定指标在数据中快速查找事件
导入及导出各种文件格式
解码带时钟和不带时钟的并行总线
FastFrame 分段内存
生成报告
编辑会话文件，可在示波器调用 – 恢复到您离开的位置
多语言支持
I <sup>2</sup> C、SPI 和 RS-232/422/485/UART 总线串行解码、搜索和事件表分析
远程接入单台示波器
可编程接口，实现自动化
频谱视图基础版

<b>Pro License</b>
<b>Pro Serial Decode License</b>
CAN, CAN FD, LIN, FlexRay, USB2.0, eUSB2.0, Ethernet, eSPI, I3C, NRZ, SPMI, MDIO, SVID, SDLC, 8b/10b, Audio, MIPI C-PHY, MIPI D-PHY, Spacewire, Manchester, 1-Wire
<b>Pro Power License</b>
<ul style="list-style-type: none"> <li>• Advanced Power Analysis</li> <li>• Digital Power Management Analysis</li> <li>• Magnetic Analysis</li> <li>• Frequency Response Analysis</li> <li>• Inverter &amp; Motor Drive Analysis</li> <li>• IMDA DQ0</li> <li>• Serial Decode: SPMI, SVID</li> </ul>
<b>Pro Automotive License</b>
<ul style="list-style-type: none"> <li>• Jitter Analysis</li> <li>• Mask/Limit Testing</li> <li>• Inverter &amp; Motor Drive Analysis</li> <li>• IMDA DQ0</li> <li>• Serial Decode: CAN, CAN FD, LIN, FlexRay, 100BASE-T1, SENT, PSI5, and I3C</li> </ul>
<b>Pro Aerospace License</b>
<ul style="list-style-type: none"> <li>• Jitter Analysis</li> <li>• Mask/Limit Testing</li> <li>• Serial Decode: Mil-Std-1553, ARINC429, Spacewire, NRZ, and Manchester</li> </ul>
<b>Ultimate License</b>
<ul style="list-style-type: none"> <li>• Multi-Scope Analysis Solution – Remote Access and Simultaneous Synchronization of Multiple oscilloscopes on one screen Spectrum View RF vs. Time waveforms, Extended Spectrum View capture bandwidth</li> <li>• User-Defined Filter (UDFT)</li> </ul>

Add analysis packages for the capabilities you need. Powerful additions are designed to save your time in protocol decode, power measurements, jitter analysis, and ensure that you have the tools you need at your fingertips.

Multi-Scope analysis provides you with the ability to remotely connect to four oscilloscopes and acquire 32-channel data directly from them without the need to manually load/recall waveforms.

Serial protocol enables faster time to answer by highlighting packet information and errors that can be correlated with events in your acquisitions. Decoded serial data may also be searched, enabling rapid identification of events in longer captures.

Power analysis enables deeper insight into the performance of your system with measurements and plots created with a power designer in mind.

TekScope with jitter analysis uses the same DPOJET measurement framework available on Tektronix oscilloscopes. Comprehensive jitter and eye-diagram analysis, along with decomposition algorithms, simplify the discovery of signal integrity and jitter problems in today's high-speed serial, digital, and communication system designs.

Perform spectrum view analysis from your local machine while having the option to work anywhere and apply these analysis capabilities on any historical data files.

## Specifications

### General

Specification type	Subtypes		Description
TekScope PC analysis software - Version	-		v 1.34.8.303
Time measurements	22		Period, Frequency, Unit Interval, Data Rate, Positive Pulse Width, Negative Pulse Width, Skew, Delay, Rise Time, Fall Time, Phase, Rising Slew Rate, Falling Slew Rate, Burst Width, Positive Duty Cycle, Negative Duty Cycle, Time Outside Level, Setup Time, Hold Time, Duration N-Periods, High Time, and Low Time
Amplitude measurements	12		Amplitude, Maximum, Minimum, Peak-to-Peak, Positive Overshoot, Negative Overshoot, Mean, RMS, AC RMS, Top, Base, and Area
Plots	5		Histogram, Spectrum <sup>1</sup> , Eye Diagram <sup>1</sup> , Bathtub <sup>1</sup> , Time Trend, and XY/XYZ
Standard math functions	9		+, -, *, /, Integral, Derivative, Arbfilt, FFT Magnitude and Phase
Advanced math functions	33		^, <, <=, >, >=, ==, !=, Inv, (, ), Time Point Gating ( GATE {y1,y2} expression ), log, ln, Exp, Sqrt, Floor, Ceil, Fabs, Sin, Cos, Tan, Asin, Acos, Atan, Sinh, Cosh, Tanh, Intg, Diff, Min, Max, Avg, and - (negate)
Multi-Scope analysis	-	General specifications	<ul style="list-style-type: none"> <li>Maximum number of oscilloscopes: 4</li> <li>Maximum number of channels: 32</li> </ul>
	-	Signal types	<ul style="list-style-type: none"> <li>Analog data - supported</li> <li>Digital data - not supported</li> <li>Spectrum data - supported</li> </ul>
	-	Remote oscilloscope connection interfaces	<ul style="list-style-type: none"> <li>LAN - Using ethernet connection</li> <li>USB - Using automatic connection discovery</li> </ul>
	-	Oscilloscope models	Please check ' <a href="#">Remote Oscilloscope Access</a> ' for details.
	-	Data transfer modes	<ul style="list-style-type: none"> <li>Refresh waveforms - simple data transfer without triggering remote oscilloscopes.</li> <li>Acquire new waveform data upon triggering remote oscilloscopes; TekScope controls acquisition settings across all connected oscilloscopes.</li> <li>Acquire new waveform data upon triggering remote oscilloscopes; TekScope does not control acquisition settings of connected oscilloscopes - using the acquisition settings configured locally in the oscilloscopes.</li> </ul>
Power electronics measurements and analysis	4	Input analysis	Power Quality, Harmonics, Inrush Current, and Input Capacitance
	6	Amplitude analysis	Cycle Amplitude, Cycle Top, Cycle Base, Cycle Peak-to-Peak, Cycle Maximum, and Cycle Minimum

Table continued...

<sup>1</sup> only available in jitter analysis



Specification type	Subtypes		Description
	5	Timing analysis	Period, Frequency, Positive Duty Cycle, Negative Duty Cycle, Positive Pulse Width, and Negative Pulse Width
	5	Switching analysis	Switching Loss, dv/dt, di/dt, SOA, and RDS(on)
	4	Magnetic analysis	Inductance, Magnetic Property, Magnetic Loss, and Current vs. Integral of Voltage Plot
	5	Output analysis	Line Ripple, Switching Ripple, Efficiency, Turn On Time, and Turn Off Time
	5	Inverter motor drive analysis	Power Quality, Harmonics, Ripple, Efficiency, DQ0
<b>Power integrity measurements and analysis</b>	1	Ripple analysis	Ripple
	4	Transient analysis	Overshoot, Undershoot, Turn on Overshoot, and DC Rail Voltage
	2	Power sequence analysis	Turn On Time and Turn Off Time
	8	Jitter analysis	TIE, PJ, RJ, DJ, Eye Height, Eye Width, Eye High, and Eye Low
	1	Protocol decode and search analysis	SPMI Protocol
<b>Jitter measurements and analysis</b>	18	Jitter measurements	Jitter Summary, TIE, Phase Noise, TJ@BER, RJ- $\delta\delta$ , DJ- $\delta\delta$ , PJ, RJ, DJ, DDJ, DCD, SRJ, J2, J9, NPJ, F/2, F/4, and F/8
	7	Eye measurements	Eye Height, Eye Width, Eye High, Eye Height@BER, Eye Width@BER, Eye Low, and Q-Factor
	7	Amplitude measurements	Bit High, Bit Low, Bit Amplitude, DC Common Mode, AC Common Mode (Pk-Pk), Differential Crossover, and T/nT Ratio
	2	Time measurements	SSC Freq Deviation, SSC Modulation Rate
<b>Low speed protocol decode</b>	29	Protocol decode and search analysis	CAN, CAN FD, LIN, FlexRay, USB2.0, eUSB2.0, Ethernet, eSPI, I3C, NRZ, SPMI, MDIO, SVID, SDLC, 8b/10b, Audio, MIPI C-PHY, MIPI D-PHY, Spacewire, Manchester, 1-Wire, CXPI, SENT, 100BASE-T1, PS15, Mil-Std-1553, and ARINC429
<b>Remote Oscilloscope Access</b>	-	Signal types	<ul style="list-style-type: none"> <li>Analog data - supported</li> <li>Digital data - not supported</li> <li>Spectrum data - supported</li> </ul>
	-	Remote oscilloscope connection interfaces	<ul style="list-style-type: none"> <li>LAN - Using ethernet connection</li> <li>USB - Using automatic connection discovery</li> </ul>
	-	Oscilloscope models	TBS 1000 Series, TBS 2000 Series, 3 Series MDO, 4 Series MSO, 5 Series MSO, 5 Series Low-Profile MSO, 6 Series MSO, 6B Series MSO, 6 Series Low-Profile Digitizer, and DPO/MSO/DPS 70000 SX/DX/C
	-	Oscilloscope Operating System	<ul style="list-style-type: none"> <li>Embedded OS</li> <li>Windows 10 OS</li> </ul>

Table continued...

Specification type	Subtypes		Description
	-	Data transfer modes	<ul style="list-style-type: none"> <li>Refresh waveforms - simple data transfer without triggering remote oscilloscope.</li> <li>Acquire new waveform data upon triggering remote oscilloscope; TekScope controls acquisition settings of connected oscilloscope.</li> <li>Acquire new waveform data upon triggering remote oscilloscope; TekScope does not control acquisition settings of connected oscilloscope - using the acquisition settings configured locally in the oscilloscope.</li> </ul>
Supported file types	7	Import	<ul style="list-style-type: none"> <li>.tss (Tektronix 4/5/6 Series session)</li> <li>.wfm, .isf (Tektronix)</li> <li>.bin (Keysight)</li> <li>.trc (Lecroy)</li> <li>.tr0 (Spice)</li> <li>.csv (general purpose)</li> </ul>
	10	Export	<ul style="list-style-type: none"> <li>.jpg, .bmp, and .png (Screen capture - Save to PC drive, not to oscilloscope memory)</li> <li>.wfm (Tektronix Waveform Data)</li> <li>.csv, .mat (Waveform Data to CSV or Matlab format)</li> <li>.set (Setup Information)</li> <li>.tss (Tektronix 4/5/6 Series session)</li> <li>.pdf, .mht (Reports)</li> </ul>
Programmable interface	-		All licenses on TekScope include programmable interface for automated testing. The programmable interface will run on your PC and communicate with the TekScope software. Find out more in the Programmer manual: <a href="http://www.tek.com/manual/oscilloscope/4-5-6-series-mso-5-series-mso-mixed-signal-oscilloscope">www.tek.com/manual/oscilloscope/4-5-6-series-mso-5-series-mso-mixed-signal-oscilloscope</a>

## Waveform controls

**Zoom** Horizontal and/or Vertical

**Cursors** Waveform or Screen

## Plot controls

**Zoom** Horizontal and/or Vertical

**Cursors** Waveform or Screen

## Number of views

**Waveform views** One with the ability to configure in stacked, overlay, or mixed modes. Up to 32 waveforms are viewed simultaneously

## Available outputs

<b>Report</b>	Comprehensive report with measurement results, plots, and system configuration details are available in .pdf or .mht formats
<b>Composite setup</b>	Single file for saving waveforms, measurements, and configuration details
<b>Plot and measurement data</b>	Export plot and measurement data in .csv formats

## Minimum system configuration

<b>System requirements</b>	<p>64-bit Windows 10</p> <p>8 GB or higher of RAM recommended</p> <p>Intel® Core™ i5 or AMD Athlon® X4 processor (2GHz or faster)</p> <p>5 GB of available hard disk space, 10 GB recommended (exact space is dependent on the number of waveforms and their size)</p> <p>1920x1080 or greater at 100% scaling recommended</p> <p>OpenGL® 2.0, 32-bit color, and 1 GB of VRAM</p> <p>Internet Browser - Chrome or Firefox (for software and license download)<sup>2</sup></p> <p>For the best experience when using advanced features such as Serial Bus Protocol Decode, Power Measurements, Jitter Analysis, Multi-Scope, or when analyzing large numbers of waveforms and long records, we recommend more capable PC systems with additional RAM, disk space, and processor capability.</p> <p>It's highly recommended to ensure you have the latest updates from Microsoft to your Windows PC as well as Visual Studio standard redistributable library. For more details, refer to this Microsoft page <a href="https://support.microsoft.com/en-us/topic/the-latest-supported-visual-c-downloads-2647da03-1eea-4433-9aff-95f26a218cc0">support.microsoft.com/en-us/topic/the-latest-supported-visual-c-downloads-2647da03-1eea-4433-9aff-95f26a218cc0</a>.</p>
----------------------------	--

<sup>2</sup> Internet connection is needed to download the software and any license file. Once completed, Internet connection will no longer be needed. The software does not require online Internet connectivity in order to use it for its regular operation.

## Ordering information

Register and download TekScope PC software from [www.tek.com/software/tekscope-pc-analysis-software](http://www.tek.com/software/tekscope-pc-analysis-software). Software is enabled by a license file that can be downloaded from the TekCloud website using a trial or a paid license.

### Base license

Tier	License Option	Description	License Term
Starter	TEKSCOPE-STARTER	License; Starter License for TekScope PC Software; Perpetual License for 2 Individual Seats; Node Locked	Perpetual
	TEKSCOPE-STARTER-1Y	License; Starter License for TekScope PC Software; 1-Year License for 2 Individual Seats; Node Locked	1-Year Time-Based
Professional Serial Decode	TEKSCOPE-PRO-SR	License; Pro Serial Decode License for TekScope PC Software; Perpetual License for 2 Individual Seats; Node Locked	Perpetual
	TEKSCOPE-PRO-SR-1Y	License; Pro Serial Decode License for TekScope PC Software; 1-Year License for 2 Individual Seats; Node Locked	1-Year Time-Based
Professional Power	TEKSCOPE-PRO-PWR	License; Pro Power License for TekScope PC Software; Perpetual License for 2 Individual Seats; Node Locked	Perpetual
	TEKSCOPE-PRO-PWR-1Y	License; Pro Power License for TekScope PC Software; 1-Year License for 2 Individual Seats; Node Locked	1-Year Time-Based
Professional Automotive	TEKSCOPE-PRO-AUTO	License; Pro Automotive License for TekScope PC Software; Perpetual License for 2 Individual Seats; Node Locked	Perpetual
	TEKSCOPE-PRO-AUTO-1Y	License; Pro Automotive License for TekScope PC Software; 1-Year License for 2 Individual Seats; Node Locked	1-Year Time-Based
Professional Aerospace	TEKSCOPE-PRO-MIL	License; Pro Mil/Gov License for TekScope PC Software; Perpetual License for 2 Individual Seats; Node Locked	Perpetual
	TEKSCOPE-PRO-MIL-1Y	License; Pro Mil/Gov License for TekScope PC Software; 1-Year License for 2 Individual Seats; Node Locked	1-Year Time-Based

Table continued...



Tier	License Option	Description	License Term
Ultimate	TEKSCOPE-ULTIMATE	License; Ultimate License for TekScope PC Software; Perpetual License for 2 Individual Seats; Node Locked	Perpetual
	TEKSCOPE-ULTIMATE-1Y	License; Ultimate License for TekScope PC Software; 1-Year License for 2 Individual Seats; Node Locked	1-Year Time-Based

## Legacy Licenses

Product	Description	License Term	License Option
Multi-Scope Analysis	License; Multi-Scope Analysis License, Viewing and Analysis of Real-time Channels from Multiple Remote Scopes Simultaneously; 2 Individual Seats, Node Locked.	1-Year Time-Based	TEKSCOPE-MULTI-1YR
		Perpetual	TEKSCOPE-MULTI-PER
Low Speed Protocol Decode	License; Low Speed Protocol Decode - I2C, I3C, SPI, RS-232, SPMI, I2S, LJ, RJ, TDM, CAN, CAN-FD, LIN, FlexRay, SENT, 100BASE-T1 Automotive Ethernet, MIL-STD-1553, ARINC-429, SpaceWire, USB 2.0, eUSB2, PSI5, SVID, 10BASE-T / 100BASE-TX Ethernet, MDIO, NRZ, 8b/10b, MIPI D-PHY, Manchester, SDLC, 1-Wire, MIPI C-PHY CSI/DSI; 2 Individual Seats, Node Locked	1-Year Time-Based	TEKSCOPE-DECODE-1YR
		Perpetual	TEKSCOPE-DECODE-PER
Jitter Measurements and Analysis	License; Advanced Jitter and Eye Analysis; 2 Individual Seats, Node Locked	1-Year Time-Based	TEKSCOPE-DJA-1YR
		Perpetual	TEKSCOPE-DJA-PER
Power Electronics Analysis	License; Power Electronics: Advanced Power Analysis, Magnetics Analysis, Inverter Motor Drive Analysis; 2 Individual Seats, Node Locked	1-Year Time-Based	TEKSCOPE-PWR-ELC-1YR
		Perpetual	TEKSCOPE-PWR-ELC-PER
Power Integrity Analysis	License; Power Integrity: Digital Power Management and Analysis, Power Management Serial Decode and Analysis (SPMI); 2 Individual Seats, Node Locked	1-Year Time-Based	TEKSCOPE-PWR-INT-1YR
		Perpetual	TEKSCOPE-PWR-INT-PER
SpectrumView Analysis	License; SpectrumView Application; 2 Individual Seats, Node Locked	1-Year Time-Based	TEKSCOPE-SV-1YR
		Perpetual	TEKSCOPE-SV-PER
Remote Analysis for Bench Oscilloscopes	License; Real-Time Remote Data Acquisition from a Single TBS/TDS/TPS Oscilloscope, Essential Protocol Decoders - I2C, SPI, UART, CAN, CAN-FD, LIN; 2 Individual Seats, Node Locked	1-Year Time-Based	TEKSCOPE-ENTRY-1YR
		Perpetual	TEKSCOPE-ENTRY-PER

## License Comparison

	Starter	Professional	Ultimate
Base Application: Waveforms viewing and analysis, standard measurements, basic and advanced math options, basic and advanced plot options, wide range of file formats, FastFrame of segmented memory, multi-language support	✓	✓	✓
Serial decode, search and event table analysis on I2C, SPI, RS-232/422/485/UART buses.	✓	✓	✓
Remote access to a single oscilloscope Supports most Tektronix oscilloscope models	✓	✓	✓
Programmable Interface for Automation	✓	✓	✓
Multi-Scope Analysis Solution: Remote access and simultaneous synchronization of channels from multiple oscilloscopes on one screen			✓
SpectrumView RF vs. Time analysis: Extended spectrumView capture bandwidth			✓
User-Defined Filters			✓
Pro licenses	None	One	All

## Pro Licenses

<b>Serial Decode :</b>	CAN, CAN FD, LIN, FlexRay, USB2.0, eUSB2.0, Ethernet, eSPI, I3C, NRZ, SPMI, MDIO, SVID, SDLC, 8b/10b, Audio, MIPI C-PHY, MIPI D, PHY, Spacewire, Manchester, 1-Wire, and CXPI
<b>Power :</b>	Advanced Power Analysis, Digital Power, Management Analysis, Magnetic Analysis, Frequency Response Analysis, Inverter & Motor Drive Analysis, Inverter & Motor Drive Analysis, IMDA DQ0, and Serial Decode: SPMI, SVD
<b>Aerospace &amp; Defence:</b>	Jitter Analysis, Mask/Limit Testing, and Serial Decode: Mil-Std-1553, ARINC429, Spacewire, NRZ, Manchester
<b>Automotive:</b>	Jitter Analysis, Mask/Limit Testing, Inverter & Motor Drive Analysis, IMDA DQ0, and Serial Decode: CAN, CAN FD, LIN, FlexRay, 100Base-T1, SENT, PSI5, I3C

## Installing prerequisite software

Pay special attention to install the prerequisite software needed in order to run properly any licenses that you have subscribed in TekScope. The prerequisite software can be downloaded from: [scope.tekcloud.com/#/help/prerequisites](https://scope.tekcloud.com/#/help/prerequisites) (you need to sign in first to your account to access this page).

### Required for Remote Oscilloscope Access

1. Install TekVISA on the PC where TekScope software is installed.



**Note:** Ensure you have the right firewall settings configuration. You can configure the firewall settings during the TekScope installation using the installer menu, or check our User Manual for more information on how to update your firewall settings.

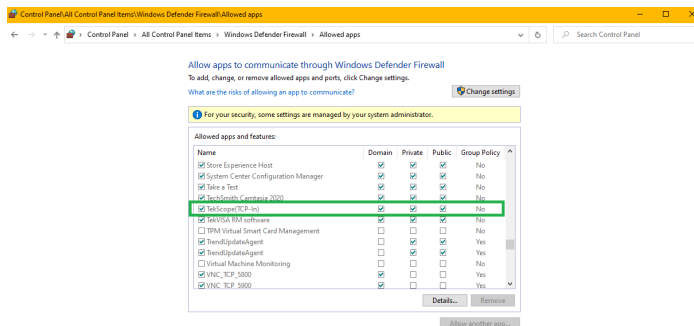
2. Install Myrtille on the oscilloscope, if it runs a Windows operating system.

### Required for Programmable Interface for Automation

1. Install TekVISA on the PC where TekScope software is installed.

## Recommendation for overcoming connection issue while trying to remotely access your oscilloscope

The company's IT firewall settings sometimes impact the ability to remotely connect to your oscilloscopes. To overcome this challenge, make sure Domain, Private, and Public checkboxes are all checked for the TekScope application in your Windows firewall list. Look at the below image for an example.



## License activation

All license options are available for a 14-day trial. At the end of the 14-day trial, you may continue using the licenses after purchasing them.

Customers can purchase advanced licenses in one of two ways:

- Placing a Purchase Order (PO) with any Tektronix Sales channels. Upon placing a PO, you will receive a software activation key. The activation key can be entered during the sign-up process or after your account is set up.

HAVE A PREPAID CODE?

PREPAID CODE

(case-sensitive)

[APPLY](#)

- Using a credit card directly on the TekCloud website [Available only to U.S. Customers].

Payment required Add Card

### ← Add Payment Method

Credit Card \*

Card number MM / YY CVC

[Cancel](#) [Add Card](#)

## License types and software updates

The following definitions apply to the TekScope license types:

**Maintenance for Software:** Maintenance for software offers continuous delivery of software updates when purchased with perpetual licenses or time-based licenses. Perpetual licenses include maintenance for the first year but will require a new maintenance license to continue to receive updates after the first year. If you have a time-based license, maintenance is active during the period of the time-based license only.

**Perpetual License:** The software can be used indefinitely; license does not expire but updates/support only available for the first 12-months. Support can be extended by purchasing a maintenance license. If a perpetual license goes out of support, all features will be frozen to the last released version before the support expired. The software will continue to work, but you cannot get any updates newer than the support expiration date.

**Maintenance License:** Apply to perpetual licenses only. Maintenance license is an extension license that extends the period of support of an original perpetual license for 12 months.

**Time-Based License:** The software can be used through the term of the license only. Software updates and support through the term of the license are included. When the Time-Based license expires, all features will no longer work, but a new Time-Based license may be purchased.

Every TekScope license is a Node-Locked License and is used on a PC. Upon purchasing a TekScope license, you have the option to use it for two software installations on individual PCs. However, bear in mind that these are not floating or enterprise licenses that can be moved from one PC to another. Customers can install the license on two different PCs or on the same PC while using two different users to log into this PC. Once installed, these two software installations can be used simultaneously.



Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.



Product(s) complies with IEEE Standard 488.1-1987, RS-232-C, and with Tektronix Standard Codes and Formats.

ASEAN / Australasia (65) 6356 3900  
 Belgium 00800 2255 4835\*  
 Central East Europe and the Baltics +41 52 675 3777  
 Finland +41 52 675 3777  
 Hong Kong 400 820 5835  
 Japan 81 (120) 441 046  
 Middle East, Asia, and North Africa +41 52 675 3777  
 People's Republic of China 400 820 5835  
 Republic of Korea +822 6917 5084, 822 6917 5080  
 Spain 00800 2255 4835\*  
 Taiwan 886 (2) 2656 6688

Austria 00800 2255 4835\*  
 Brazil +55 (11) 3759 7627  
 Central Europe & Greece +41 52 675 3777  
 France 00800 2255 4835\*  
 India 000 800 650 1835  
 Luxembourg +41 52 675 3777  
 The Netherlands 00800 2255 4835\*  
 Poland +41 52 675 3777  
 Russia & CIS +7 (495) 6647564  
 Sweden 00800 2255 4835\*  
 United Kingdom & Ireland 00800 2255 4835\*

Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777  
 Canada 1 800 833 9200  
 Denmark +45 80 88 1401  
 Germany 00800 2255 4835\*  
 Italy 00800 2255 4835\*  
 Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90  
 Norway 800 16098  
 Portugal 80 08 12370  
 South Africa +41 52 675 3777  
 Switzerland 00800 2255 4835\*  
 USA 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

**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).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.

3 Aug 2021 48W-61673-4  
[www.tek.com](http://www.tek.com)

**Tektronix**<sup>®</sup>