

罗德与施瓦茨

The R&S®RTB2000 Power of 10



R&S®RTB2000

对于目标观众的大趋势



- IoT - 特别是教育类客户和一些仪器预算较少的公司
- 期望更大的显示屏幕 / 更好的外观（年长的工程师，工作台空间更高大上）
- 期望从新一代技术中增加功能 — 但价格不变

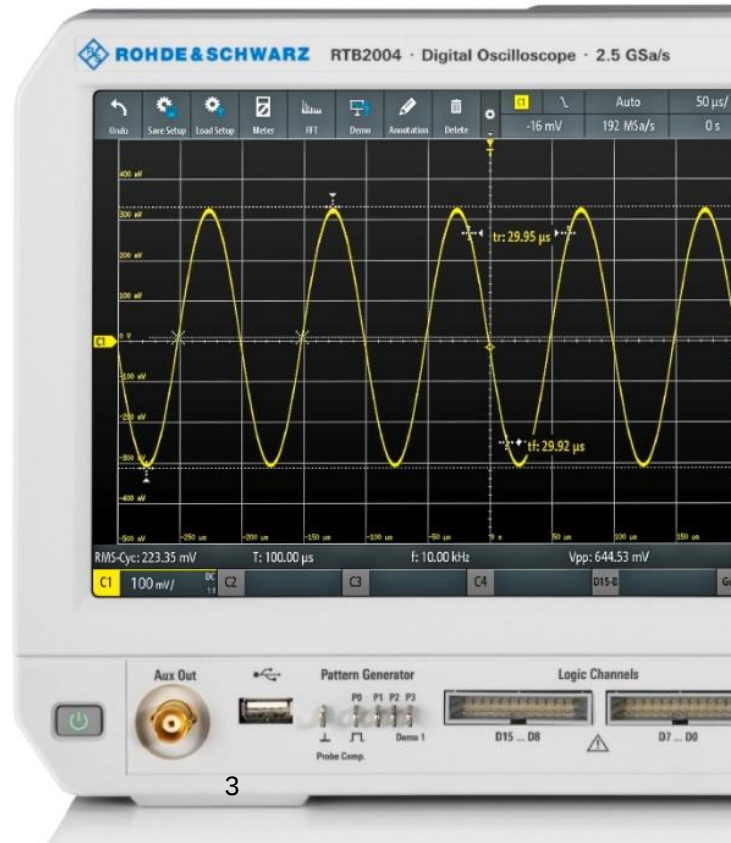
RTB2000 —— Power of 10

全球首款2000级别的示波器，具有：

10-bit ADC

10 MSample 存储深度

10" 触摸屏



RTB2000

10-bit ADC

垂直分辨率提升4倍

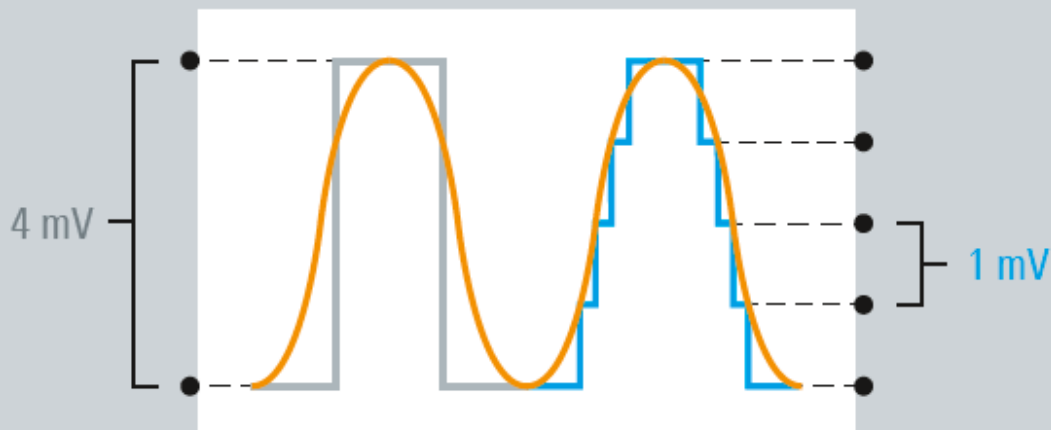
传统示波器

■ 8 位垂直分辨率

R&S®RTB2000

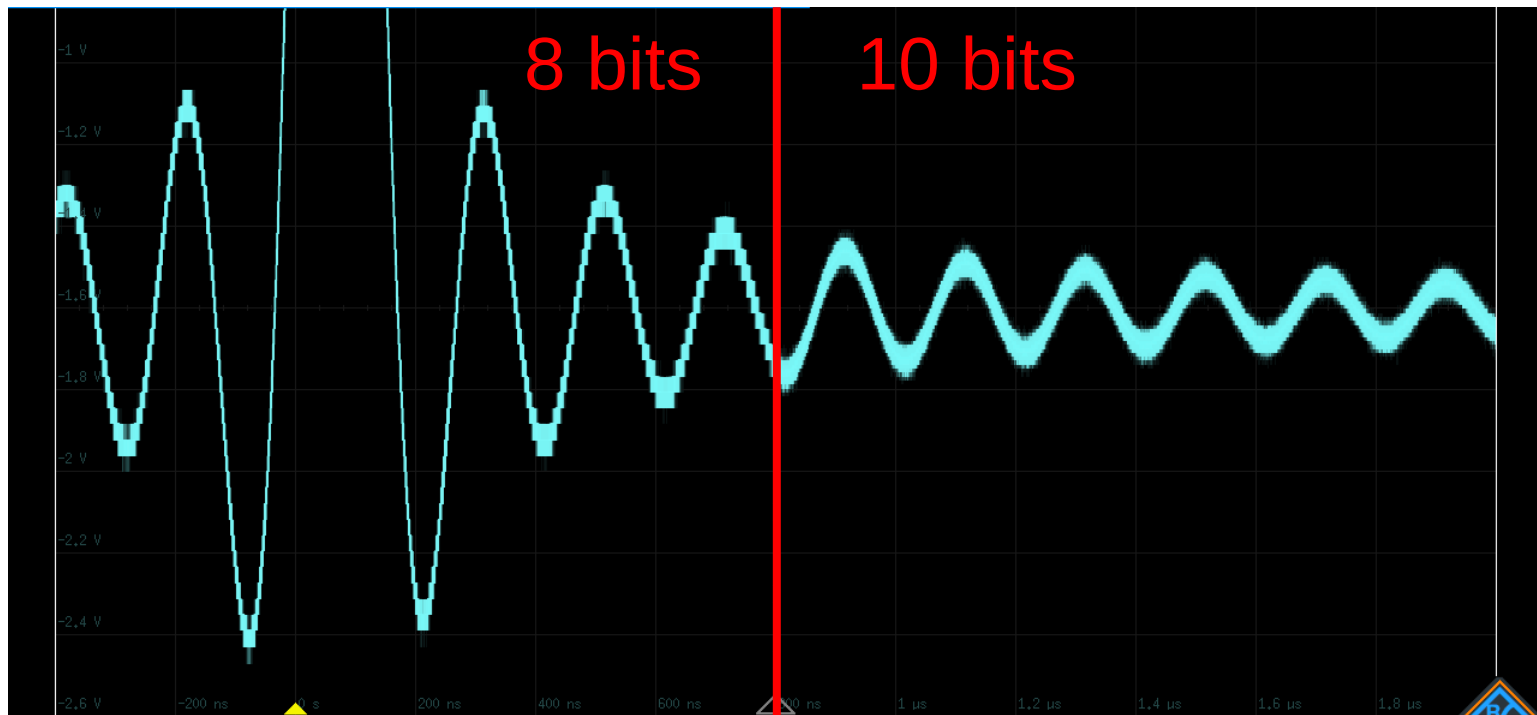
■ 10 位垂直分辨率

最佳分辨率，1V信号



10-bit ADC

垂直分辨率提升4倍



10 Msample 存储深度 捕获更长时间波形

存储深度是同级传统示波器的 10 到 100 倍

具有领先的 160 Msample 存储深度，可采集最长的时间序列

R&S®RTB2000

10

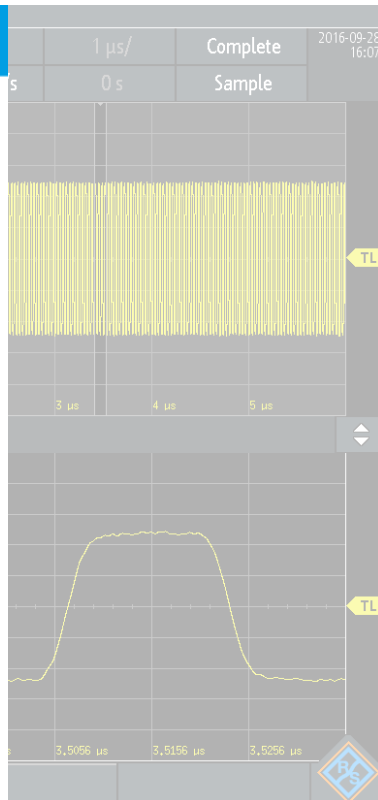
160

同类示波器

1

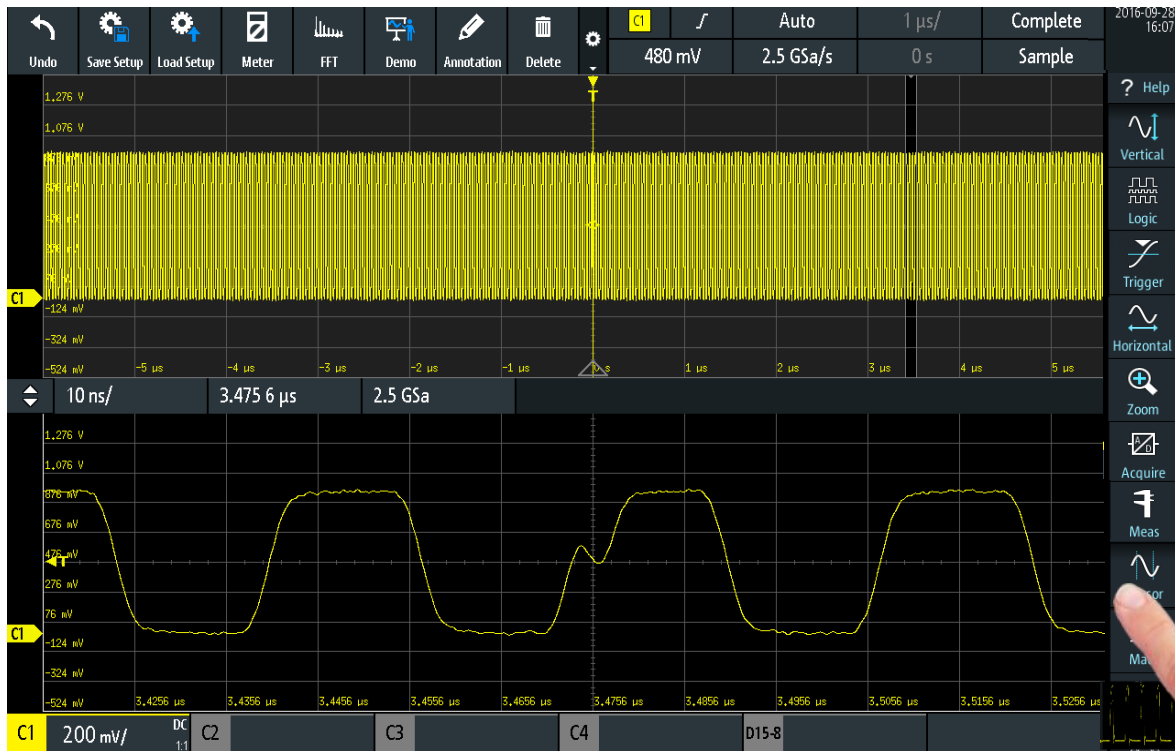
■ 标配存储

■ 可选的分段存储



10" 高分辨率电容触摸屏

支持手势操作



RTB2000概览

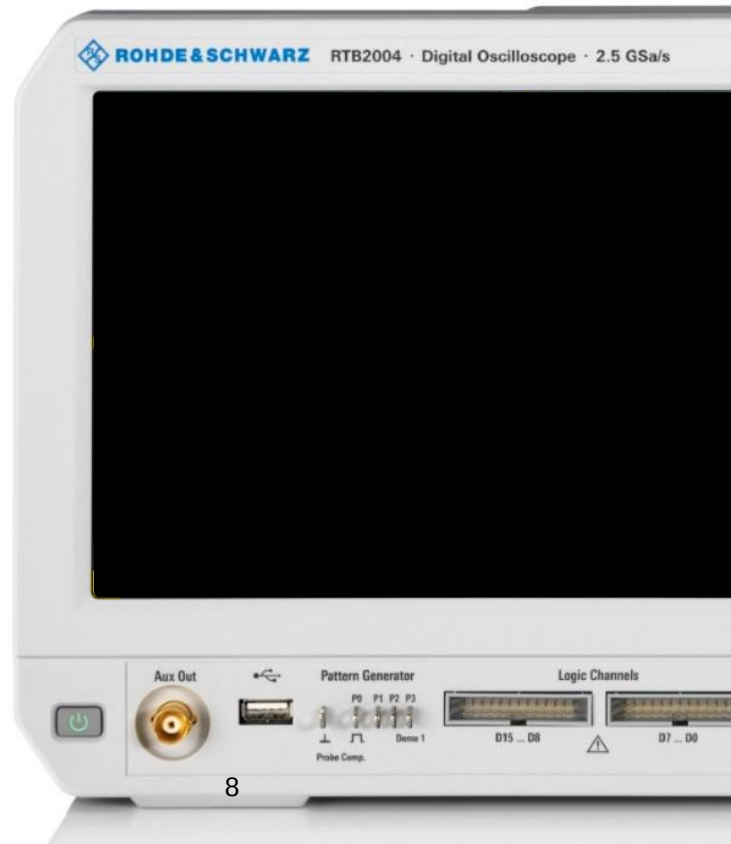
全球首款2000级别的示波器，具有：

10-bit ADC

10 MSample 存储深度

10" 触摸屏

RTB2000

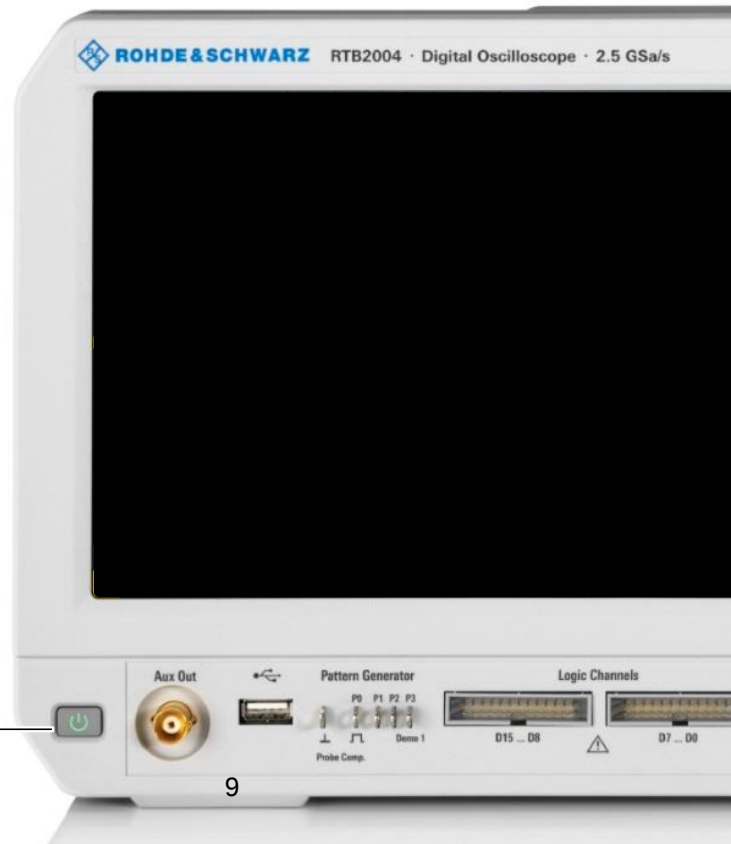


RTB2000概览

全球首款2000级别的示波器，具有：

10秒开机时间

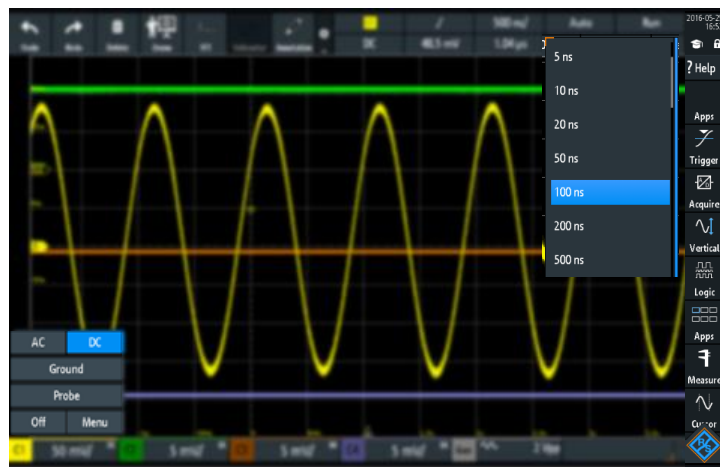
RTB2000





快速访问重要工具

- 用于访问常用功能的工具栏
- 用于直观的进行功能设置的工具条





一键式结果保存

■ 屏幕截图或仪器设置保存

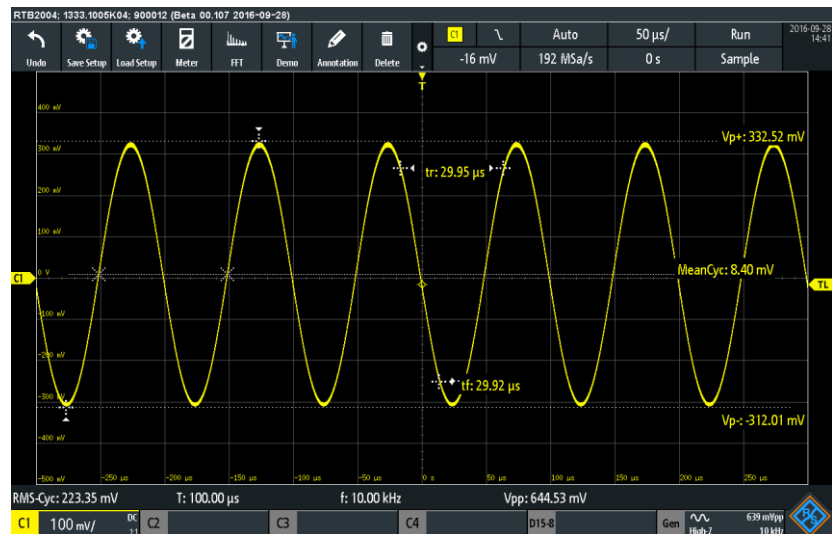


自动设置功能

- 自动选择垂直、水平和触发设置，以最佳方式查看当前信号
- 设置FFT参数



使用颜色编码控件显示当前通道



快速测量：一键测量结果

■ 在波形上直接显示当前信号的主要测量结果



保护仪器和数据

- 防盗锁插孔
- 用于经济型锁的锁环
- 安全擦除功能



标配连接

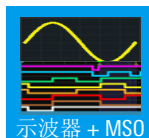
- USB device（前面板）和 host（后面板）
- 标配以太网LAN连接和远程显示

R&S®RTB2000

新的维度——多合一



集多种仪器于一体



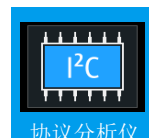
示波器 + MSO



XY模式



数字电压表



协议分析仪



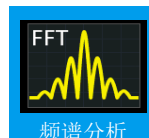
模板测试



协议



触发计数器



频谱分析



函数发生器



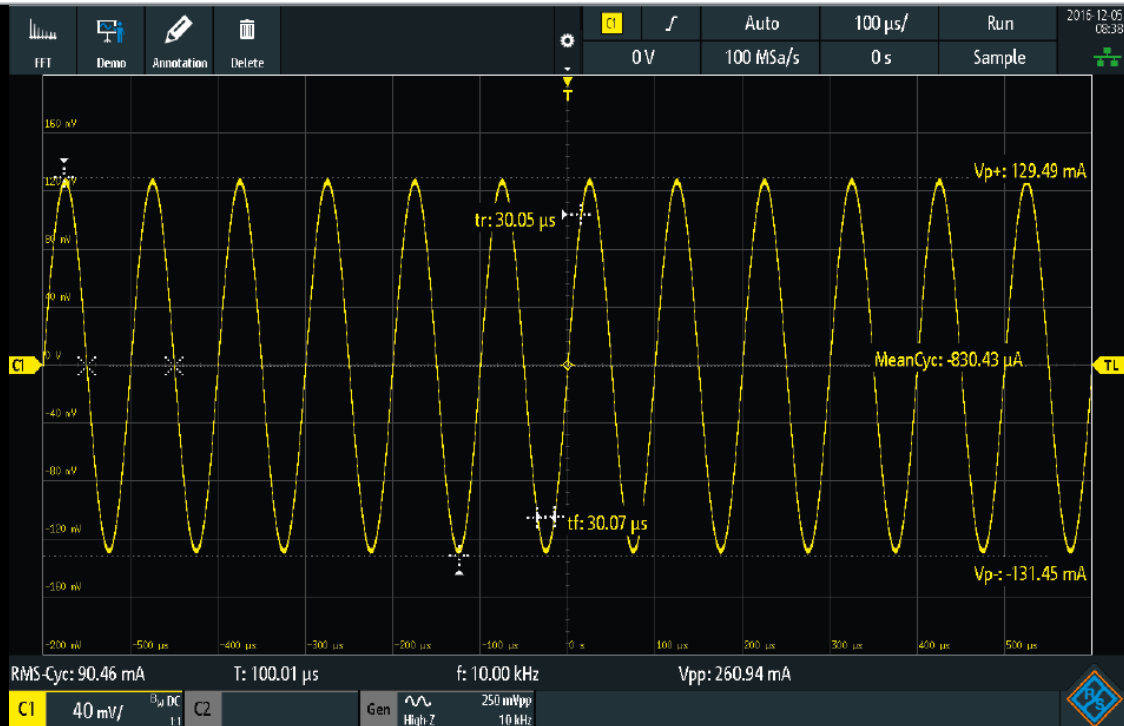
码型发生器

新的维度——多合一

示波器



示波器 + MSO



快速测量：
一键测量所有主要参数

新的维度——多合一

示波器



示波器 + MSO



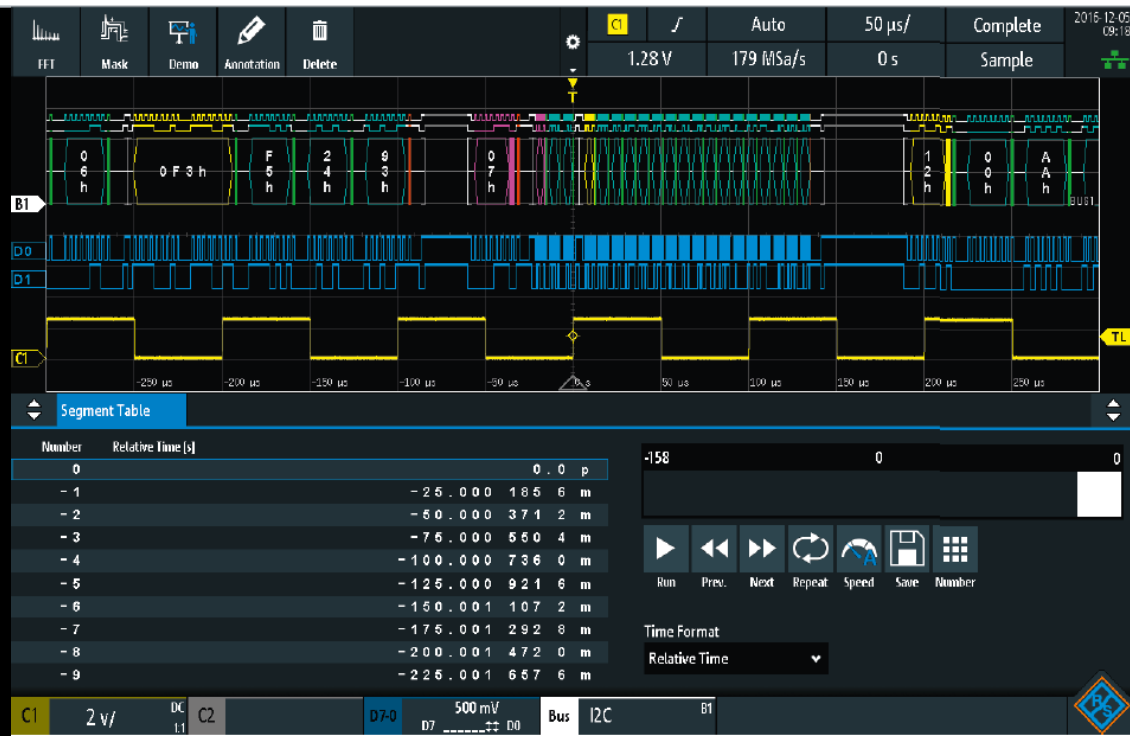
自动测量：
图形化显示
测量参数意义

新的维度——多合一

示波器



示波器 + MSO



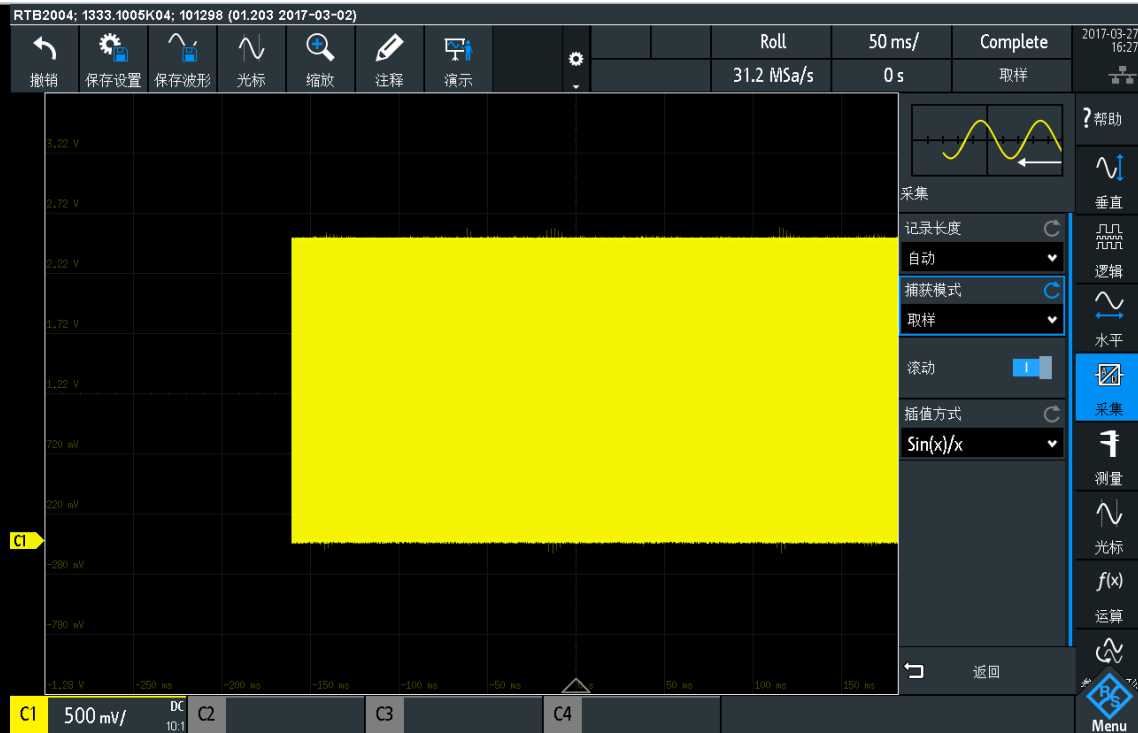
历史+分段
存储功能，
存储深度提
升至160M

新的维度——多合一

示波器



示波器 + MSO



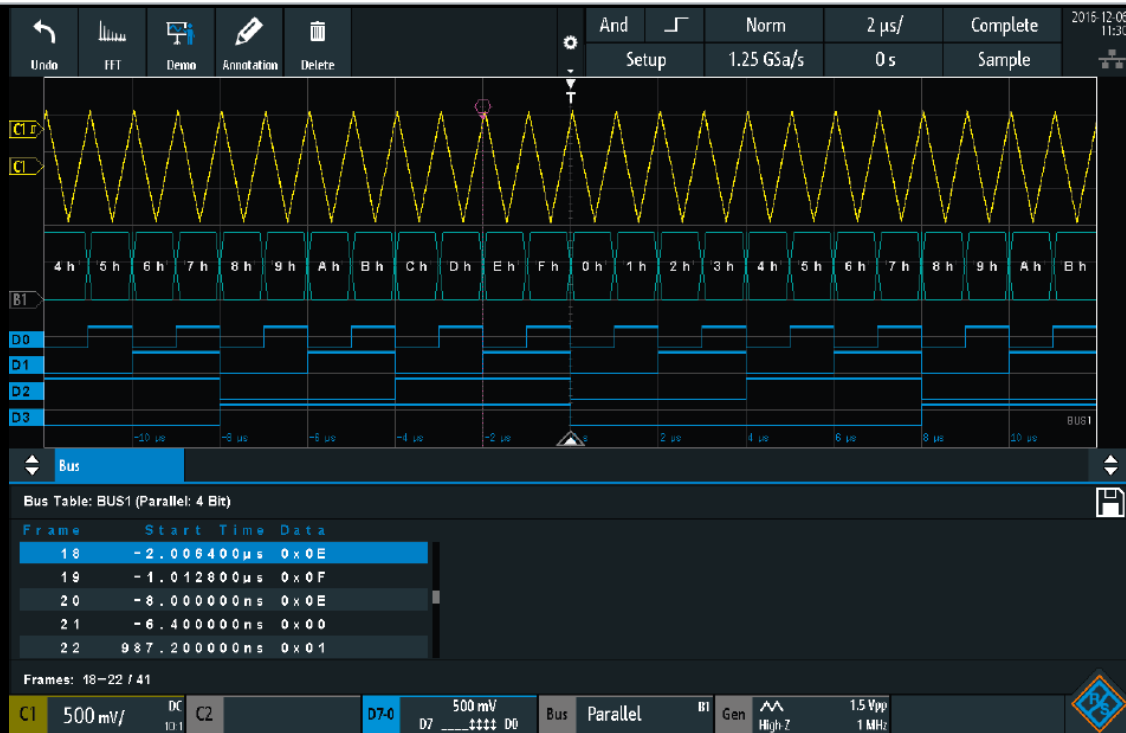
滚动模式

新的维度——多合一

MSO



示波器 + MSO



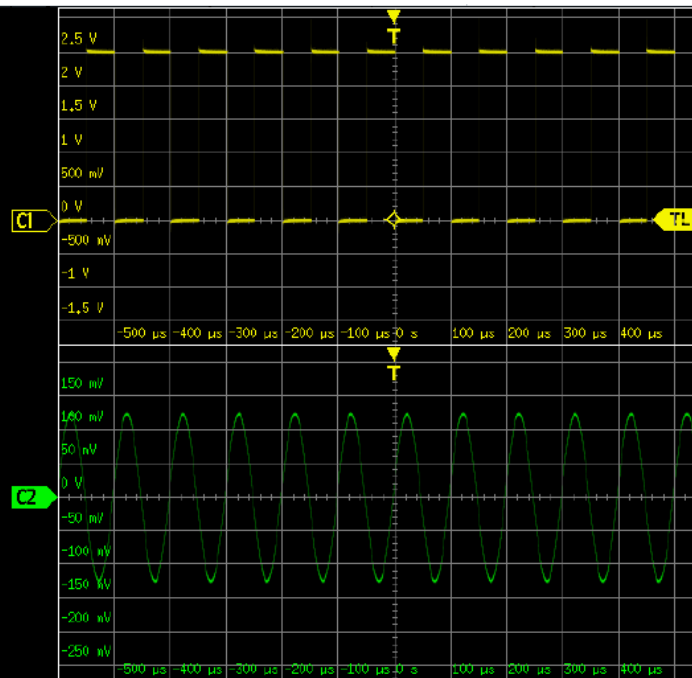
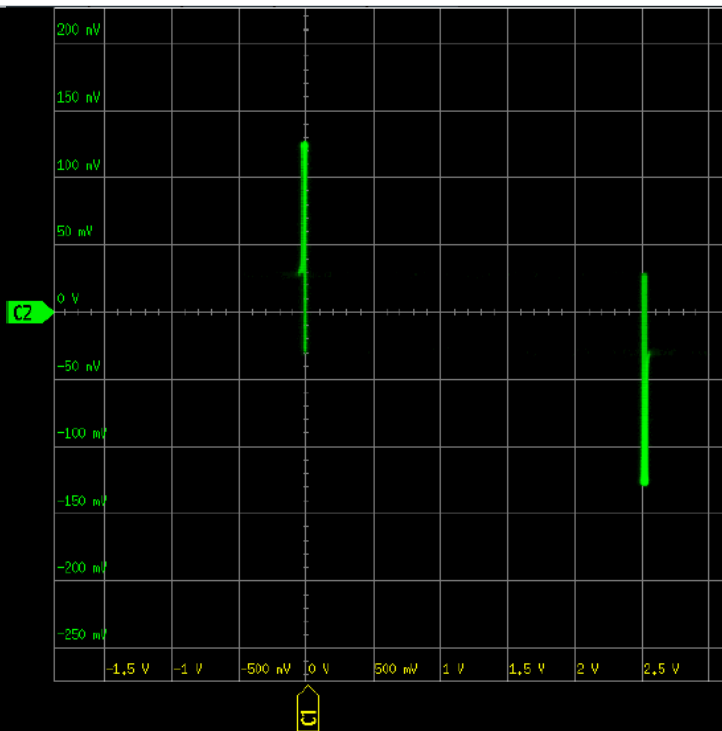
混合信号示波器：
16 路数字通道
带宽300MHz，
采样率每通道
1.25GSa/s，存
储深度每通道
10M

新的维度——多合一

XY模式



XY模式

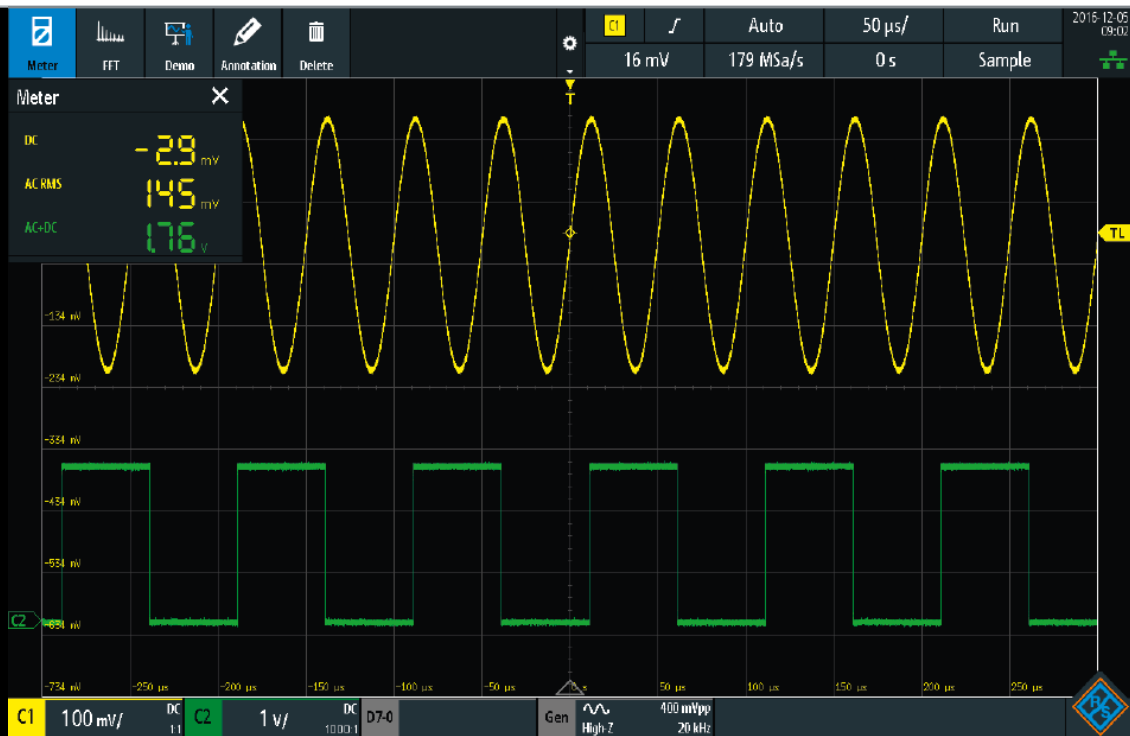


新的维度——多合一

数字电压表

13.3 mV

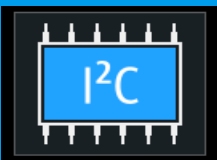
数字电压表



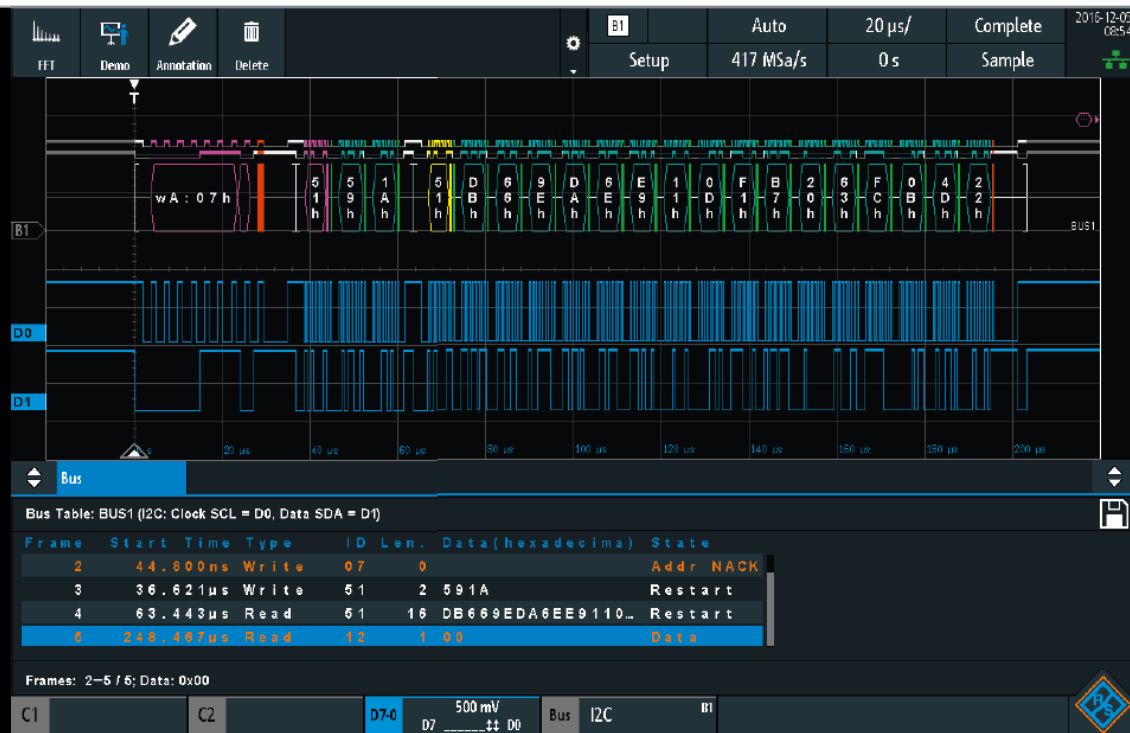
三位电压表
和六位频
率计，可实
现同步测量

新的维度——多合一

协议分析仪



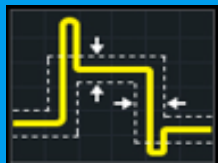
协议分析仪



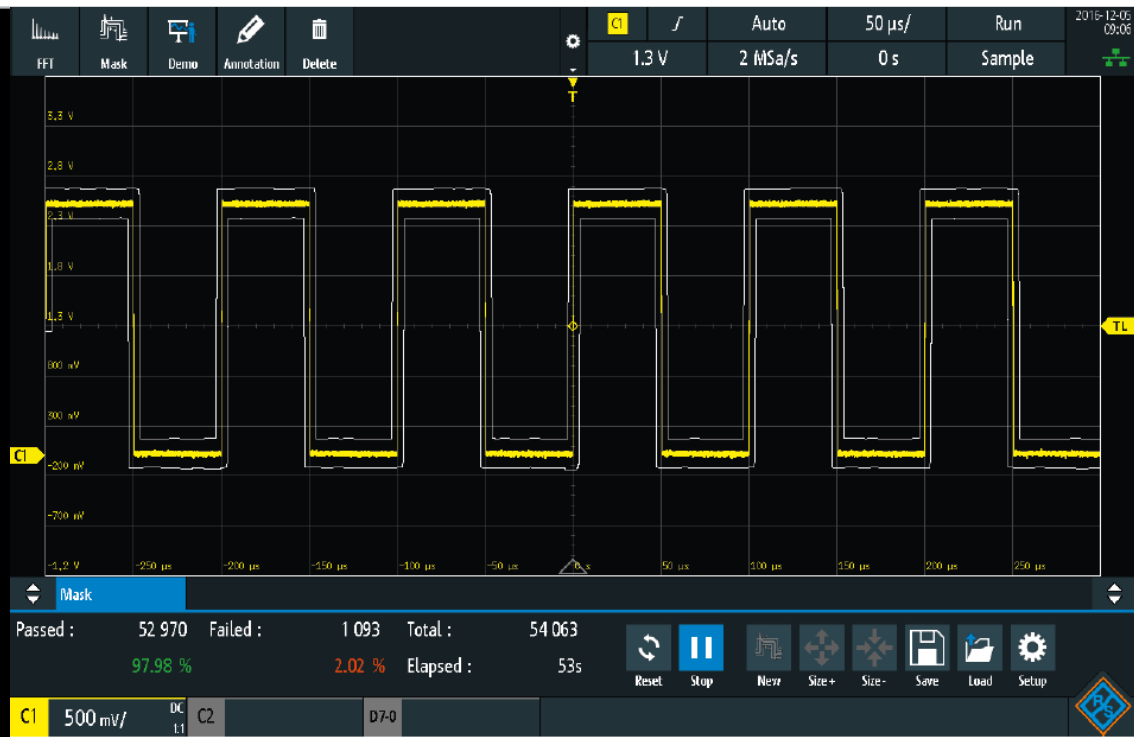
硬件实现串
行总线解码
分析

新的维度——多合一

模板测试



模板测试



支持多种动作设置:
报警声、停止、输出脉冲、截屏、保存波形

新的维度——多合一

频谱分析

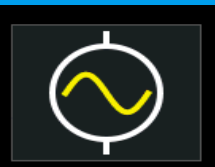


频谱分析

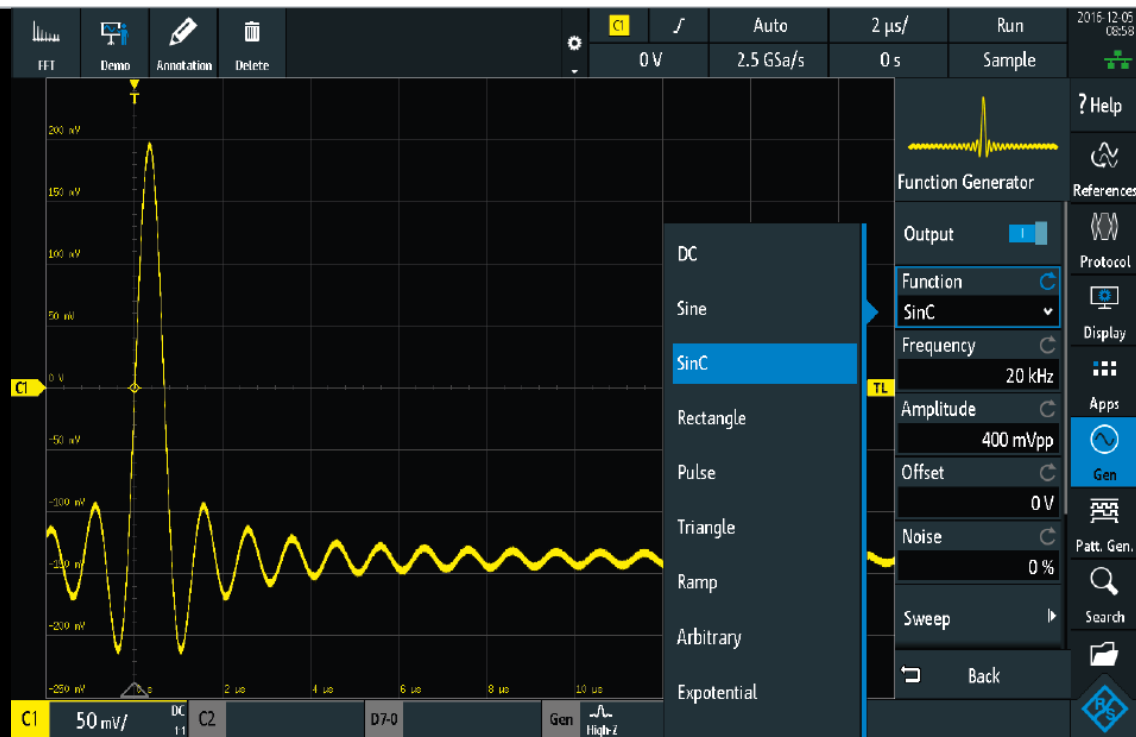


可对频谱进行自动设置，光标测量

函数发生器



函数发生器



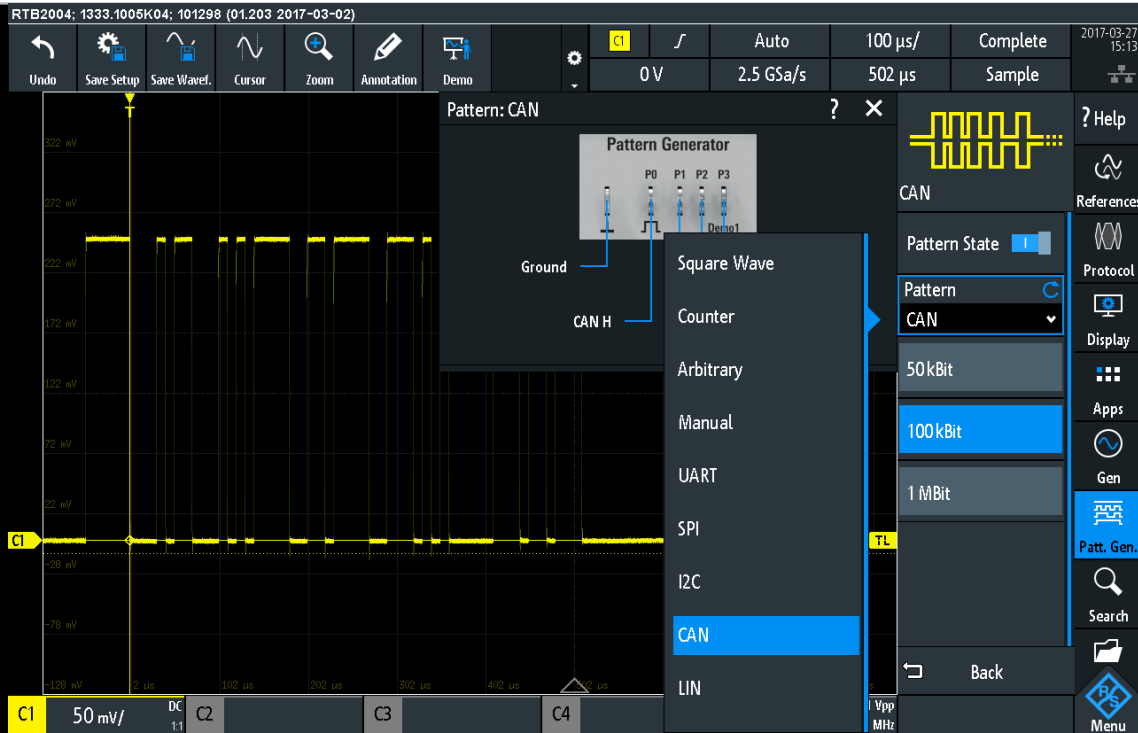
信号频率高达
25MHz，可自定义
任意输出波形，
也可从示波器波
形中复制

新的维度——多合一

码型发生器



码型发生器

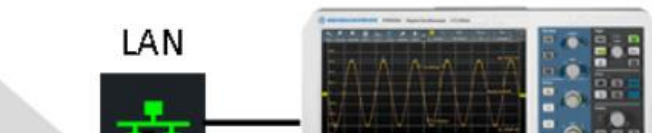
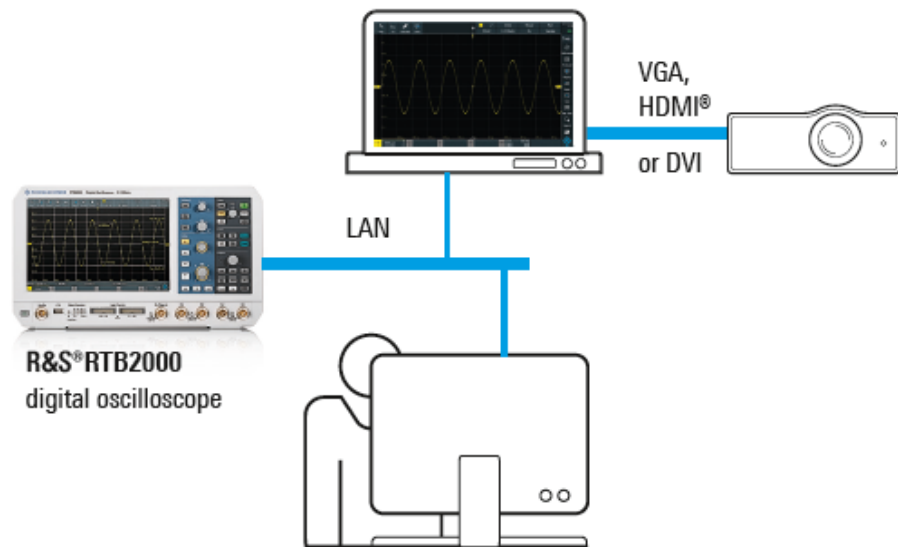


支持通用码型及
自定义码型

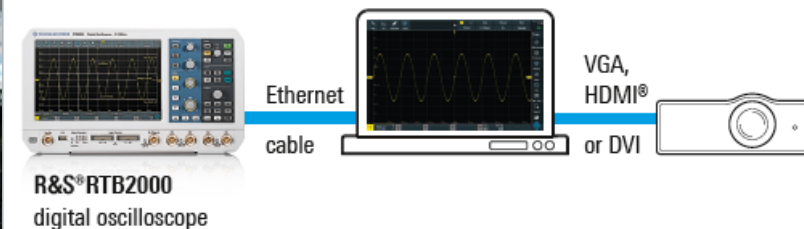
R&S®RTB2000

新的维度——灵活的远程连接方式（以太网+USB）

Connection via LAN

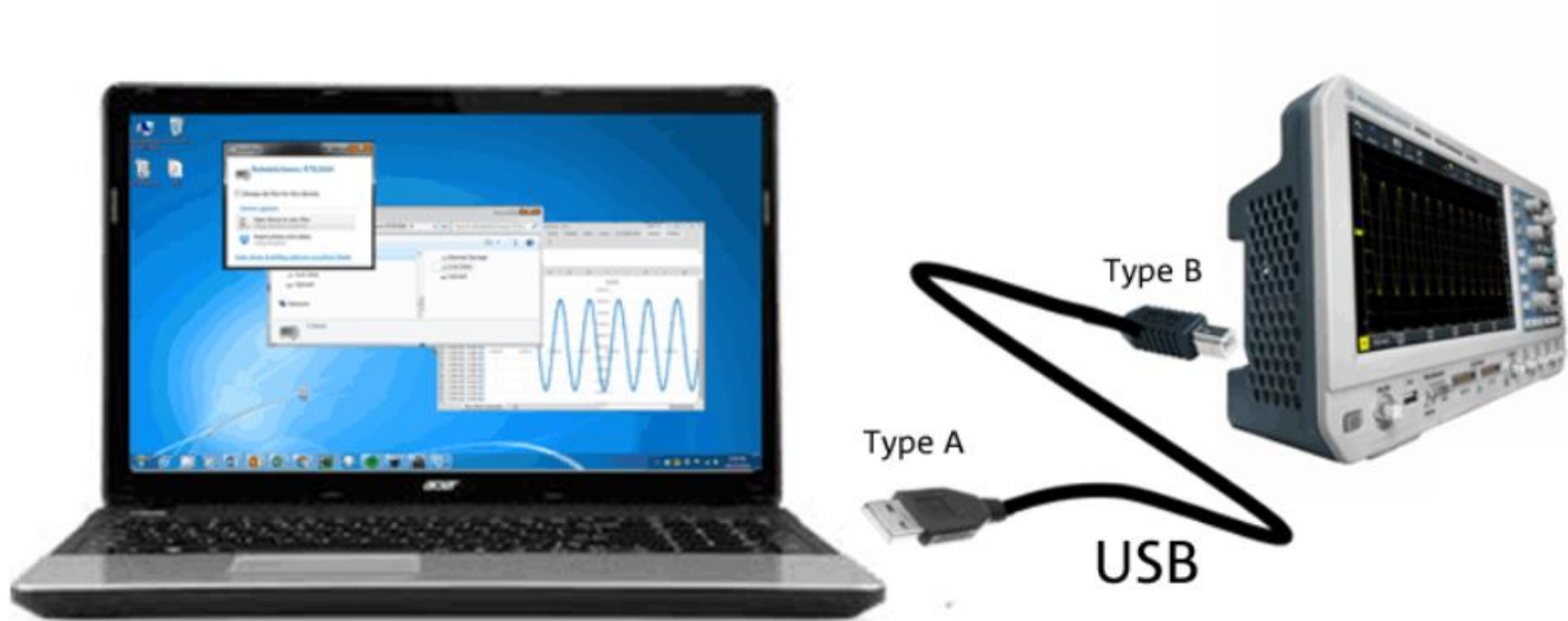


Direct connection to PC



R&S®RTB2000

新的维度——灵活的远程连接方式（以太网+USB）



新的维度——灵活的远程连接方式（以太网）



新的维度——灵活的远程连接方式（以太网）



Instrument Home

Screenshot

SCPI Device Control

Save/Recall

Network Settings

Change Password

Livescreen

Remote Front Panel

Instrument Home Print view

Manufacturer: Rohde&Schwarz Device Class: Oscilloscope Device Type: RTB2004 Serial Number: 1333.1005k04/101298 Firmware Version: 01.203	Ethernet Port Description: Rohde&Schwarz RTB2004 - 101298 Host Name: R-RTB2004-00000.local. MAC Address: 00-90-B8-1F-04-72 IP Configuration: Manual IP Address: 192.168.1.9 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.1.1 DNS Server: 0.0.0.0 IP Port: 5025 Transfer Mode: 1000 Mbps - Full Duplex VISA Resource Name: TCPIP::192.168.1.9::INSTR Device Identification: ☐ On ☒ Off
--	--

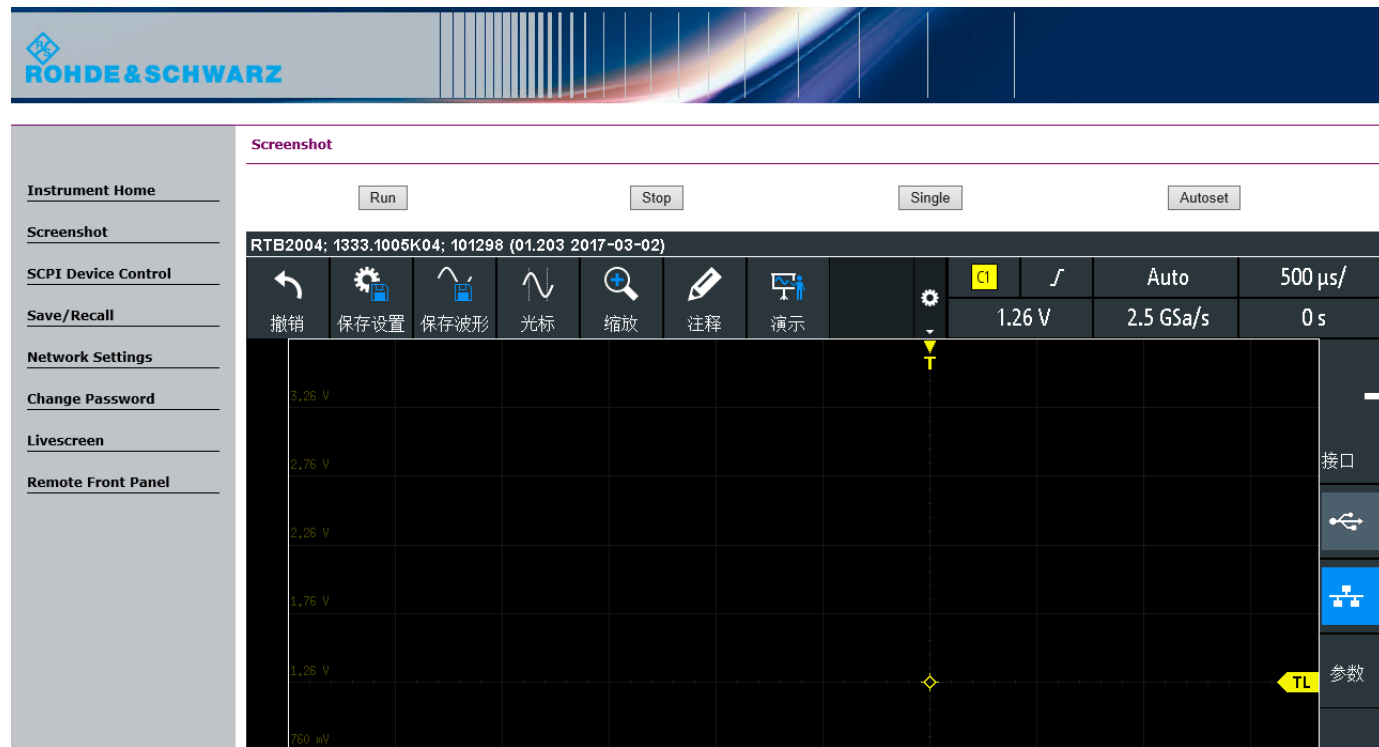


USB Port Vendor ID: 0AAD (hex) Product ID: 01D6 (hex)
--

©2017 ROHDE&SCHWARZ. All rights reserved.

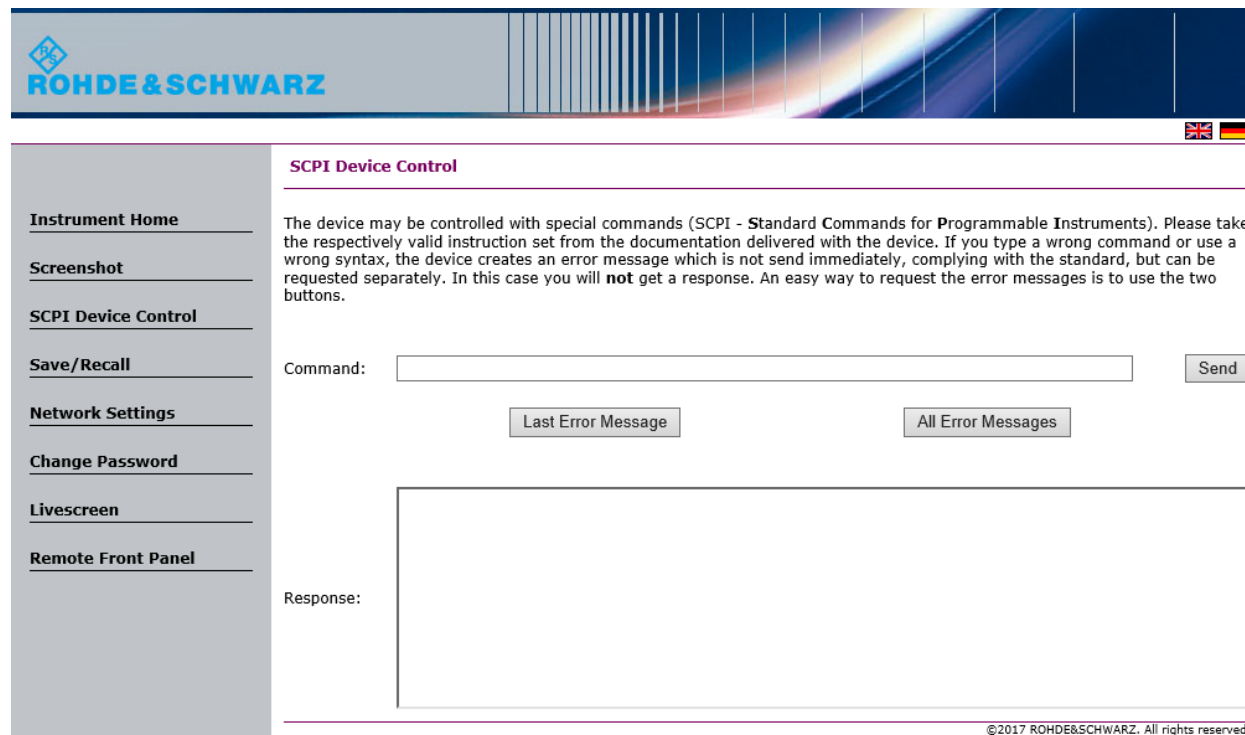
设备程控主页

新的维度——灵活的远程连接方式（以太网）



截屏
简单控制功能

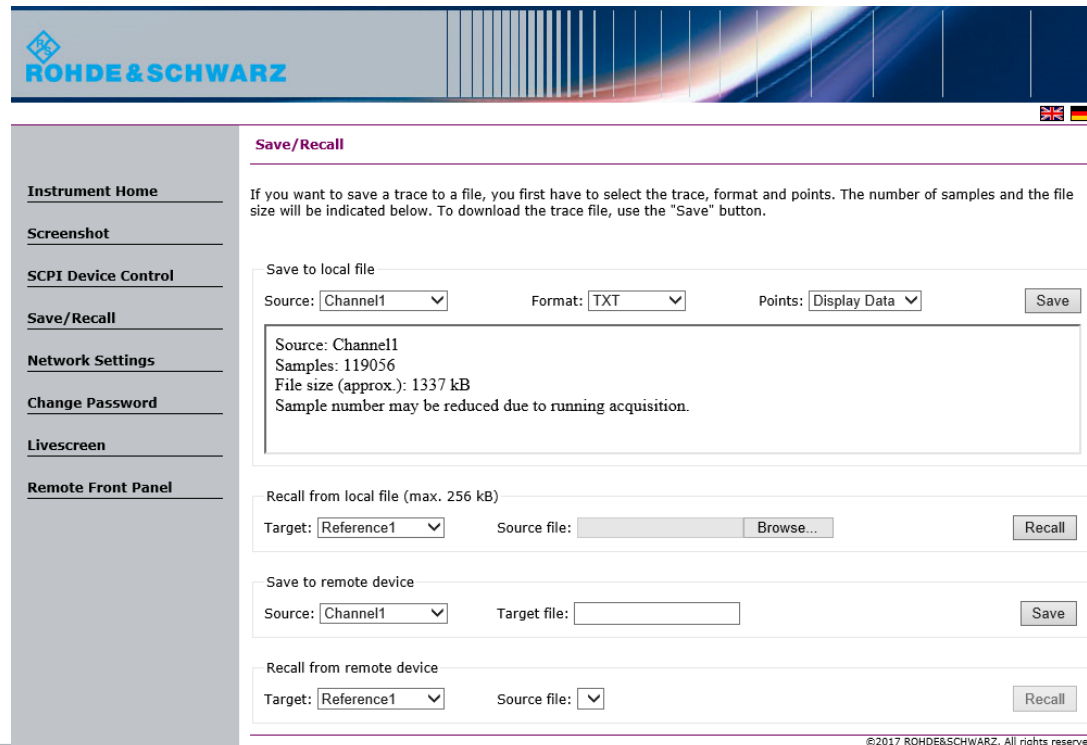
新的维度——灵活的远程连接方式（以太网）



The screenshot displays the R&S RTB2000 web interface. At the top, there is a header with the R&S logo and the text "ROHDE & SCHWARZ". Below this, a navigation menu on the left lists several options: "Instrument Home", "Screenshot", "SCPI Device Control" (which is highlighted), "Save/Recall", "Network Settings", "Change Password", "Livescreen", and "Remote Front Panel". The main content area is titled "SCPI Device Control" and contains a paragraph explaining that the device can be controlled using special commands (SCPI - Standard Commands for Programmable Instruments). It advises users to refer to the documentation for valid instructions and syntax. Below the text, there is a "Command:" label followed by a text input field and a "Send" button. Underneath the input field are two buttons: "Last Error Message" and "All Error Messages". At the bottom of the main area, there is a "Response:" label followed by a large, empty rectangular box for displaying the device's response. In the top right corner of the interface, there are small flags for the United Kingdom and Germany. At the very bottom of the page, a copyright notice reads "©2017 ROHDE&SCHWARZ. All rights reserved."

SCPI程控功能
页面

新的维度——灵活的远程连接方式（以太网）



ROHDE & SCHWARZ

Save/Recall

If you want to save a trace to a file, you first have to select the trace, format and points. The number of samples and the file size will be indicated below. To download the trace file, use the "Save" button.

Save to local file

Source: Format: Points:

Source: Channel1
Samples: 119056
File size (approx.): 1337 kB
Sample number may be reduced due to running acquisition.

Recall from local file (max. 256 kB)

Target: Source file:

Save to remote device

Source: Target file:

Recall from remote device

Target: Source file:

©2017 ROHDE & SCHWARZ. All rights reserved.

保存/读取波形
文件页面

新的维度——灵活的远程连接方式（以太网）

**ROHDE & SCHWARZ**



[Print view](#) 

[Instrument Home](#)

[Screenshot](#)

[SCPI Device Control](#)

[Save/Recall](#)

[Network Settings](#)

[Change Password](#)

[Livescreen](#)

[Remote Front Panel](#)

Network Settings

Warning: Changing the network settings may result in loss of connection!

Host Name:

Description:

IP Configuration: ☐ Automatic ☒ Manual

IP Address: . . .

Subnet Mask: . . .

Default Gateway: . . .

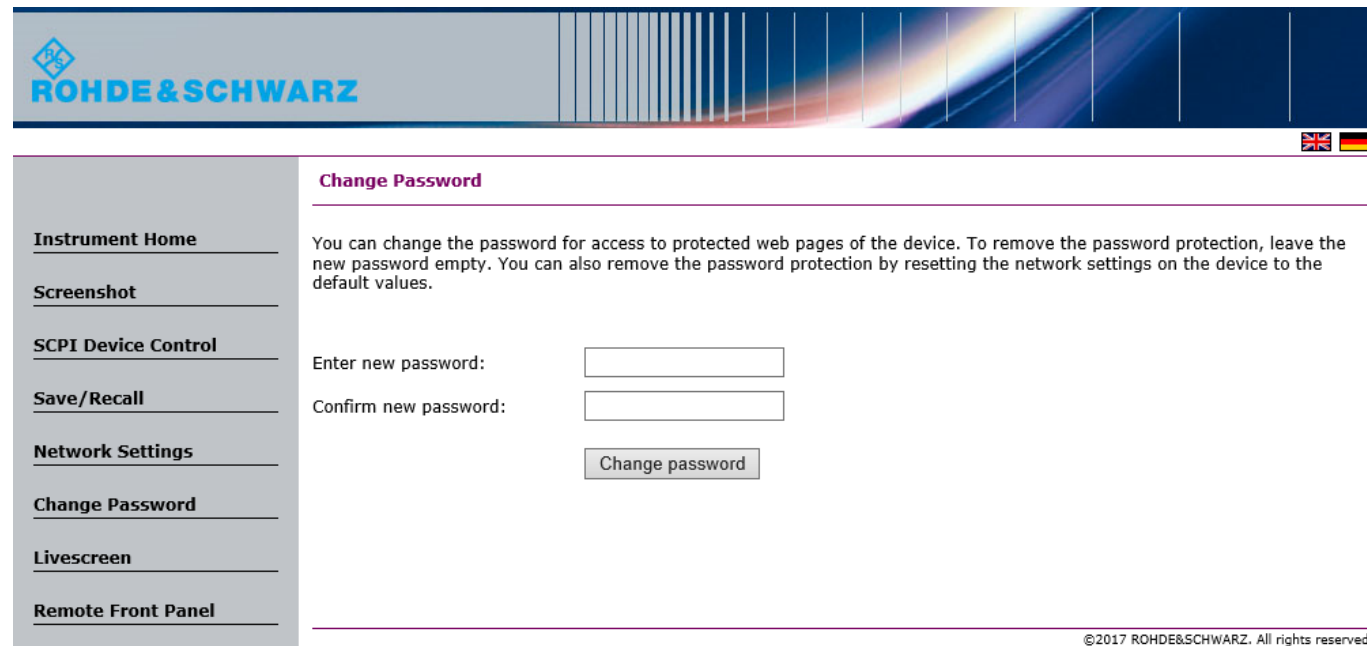
DNS Server: . . .

IP Port:

Transfer Mode:

示波器网络设置页面

新的维度——灵活的远程连接方式（以太网）



The screenshot displays the R&S RTB2000 web interface. At the top, there is a header bar with the R&S logo and the text 'ROHDE & SCHWARZ'. Below the header, a navigation menu on the left lists several options: 'Instrument Home', 'Screenshot', 'SCPI Device Control', 'Save/Recall', 'Network Settings', 'Change Password', 'Livescreen', and 'Remote Front Panel'. The 'Change Password' option is currently selected. The main content area is titled 'Change Password' and contains a paragraph explaining the password change process: 'You can change the password for access to protected web pages of the device. To remove the password protection, leave the new password empty. You can also remove the password protection by resetting the network settings on the device to the default values.' Below this text, there are two input fields: 'Enter new password:' and 'Confirm new password:'. A 'Change password' button is located below the second input field. At the bottom right of the page, there is a copyright notice: '©2017 ROHDE & SCHWARZ. All rights reserved.'

Change Password

You can change the password for access to protected web pages of the device. To remove the password protection, leave the new password empty. You can also remove the password protection by resetting the network settings on the device to the default values.

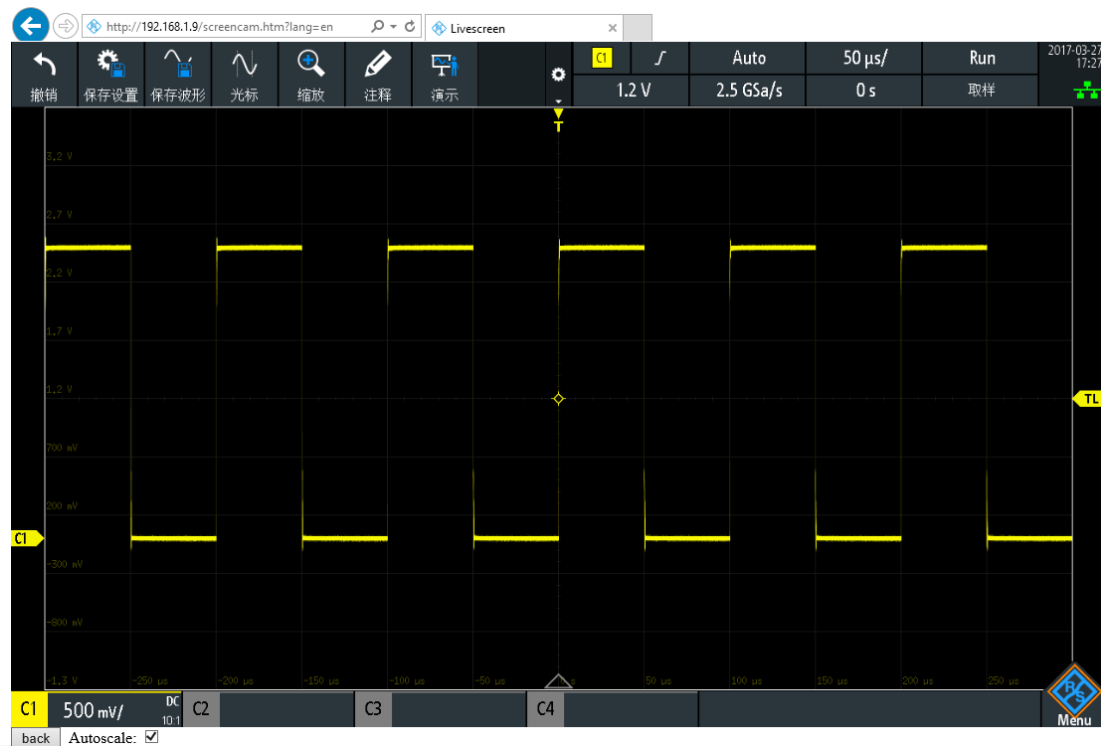
Enter new password:

Confirm new password:

©2017 ROHDE & SCHWARZ. All rights reserved.

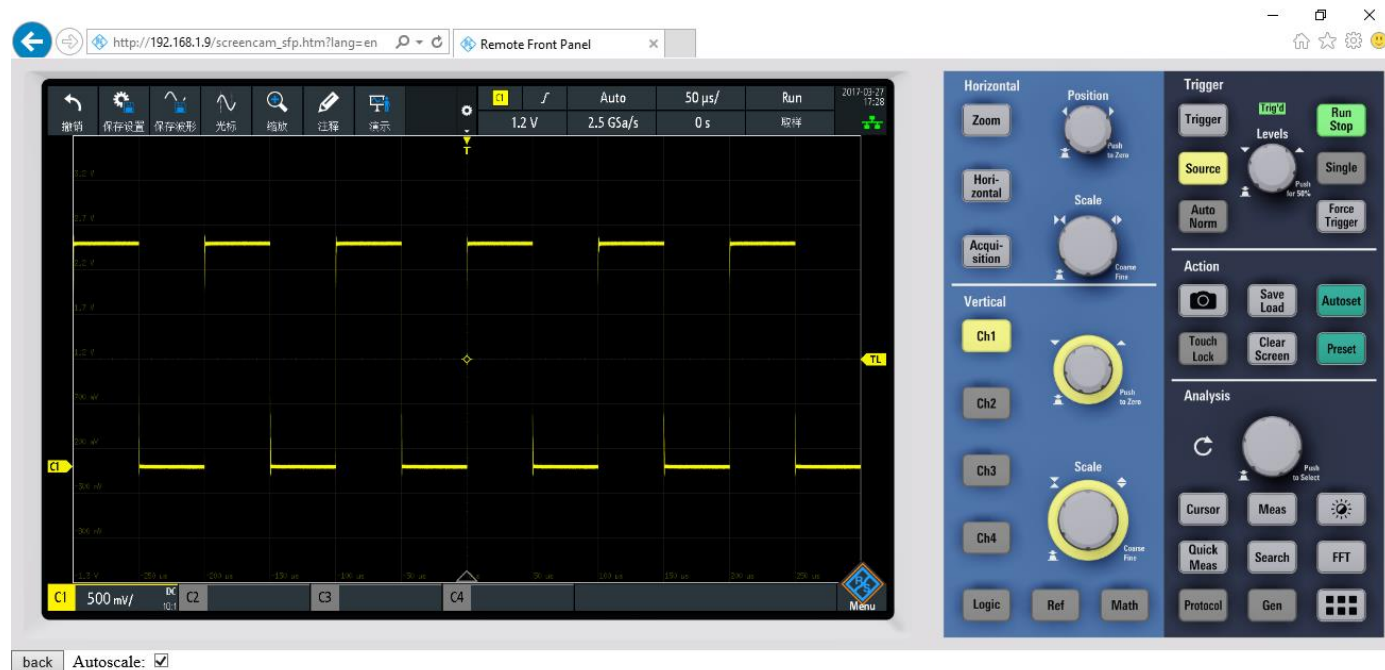
修改示波器密
码页面

新的维度——灵活的远程连接方式（以太网）



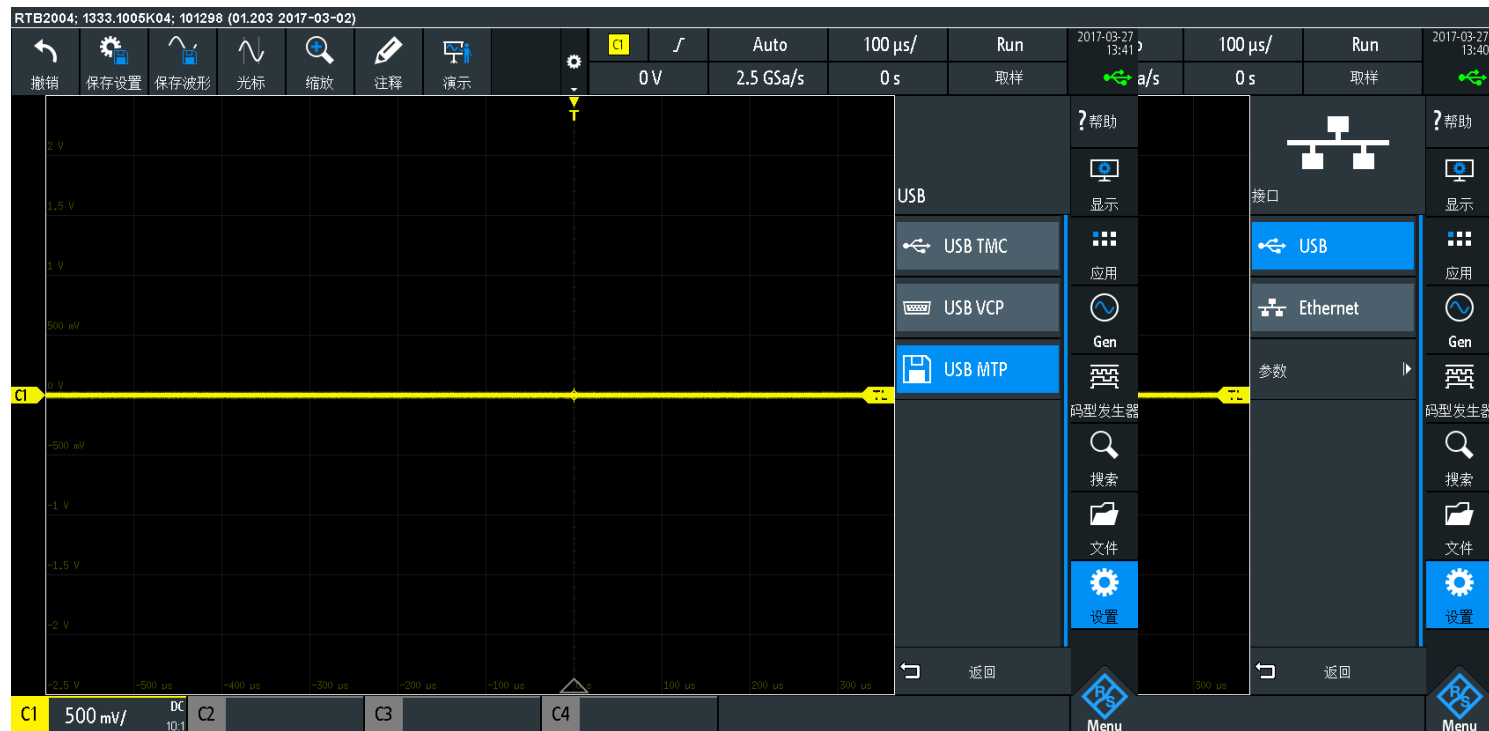
示波器屏幕实时监控页面

新的维度——灵活的远程连接方式（以太网）

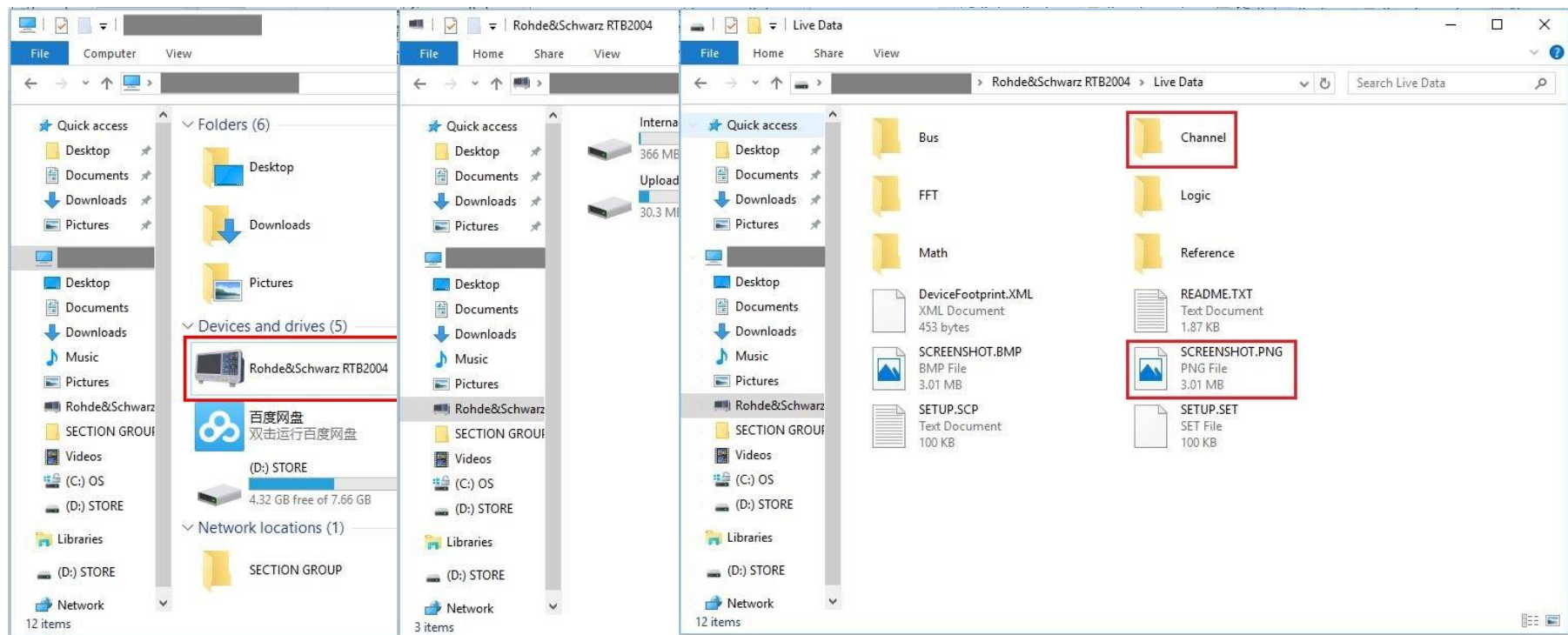


远程控制页面

新的维度——灵活的远程连接方式（USB）



新的维度——灵活的远程连接方式（USB）

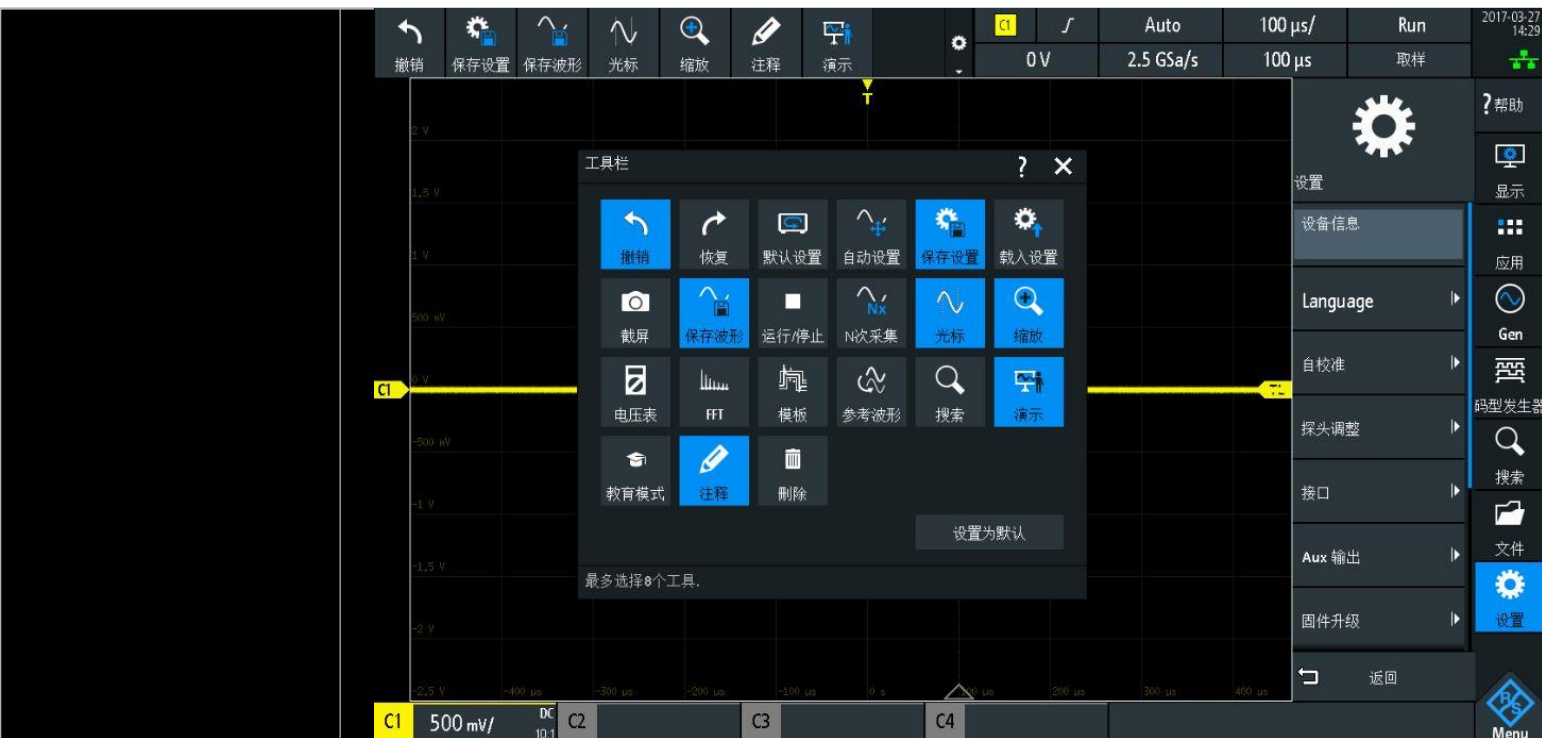


R&S®RTB2000

新的维度——易用性

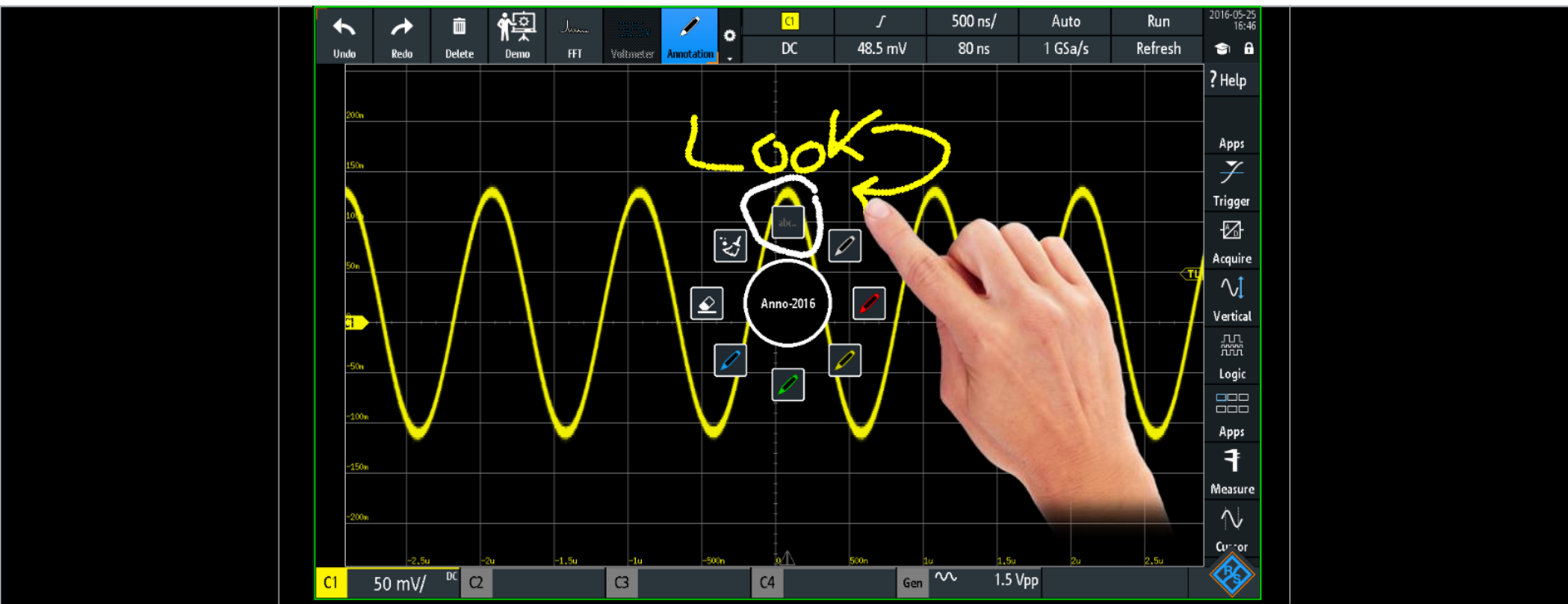


新的维度——易用性

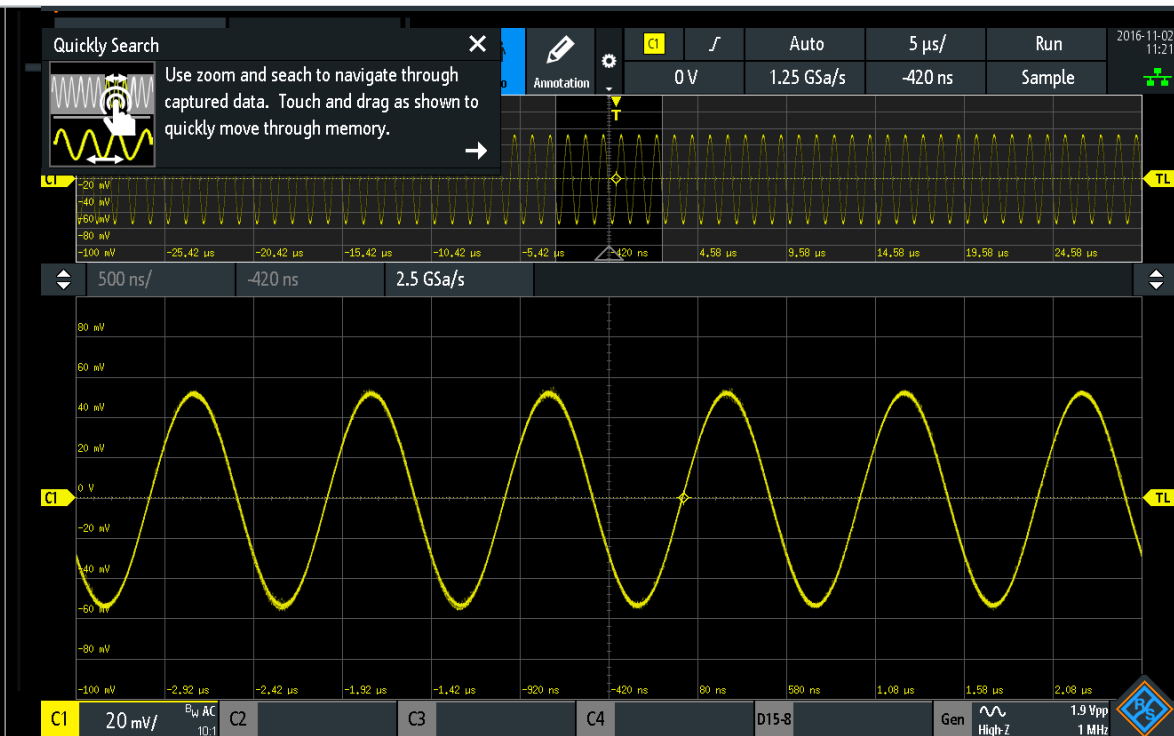


R&S®RTB2000

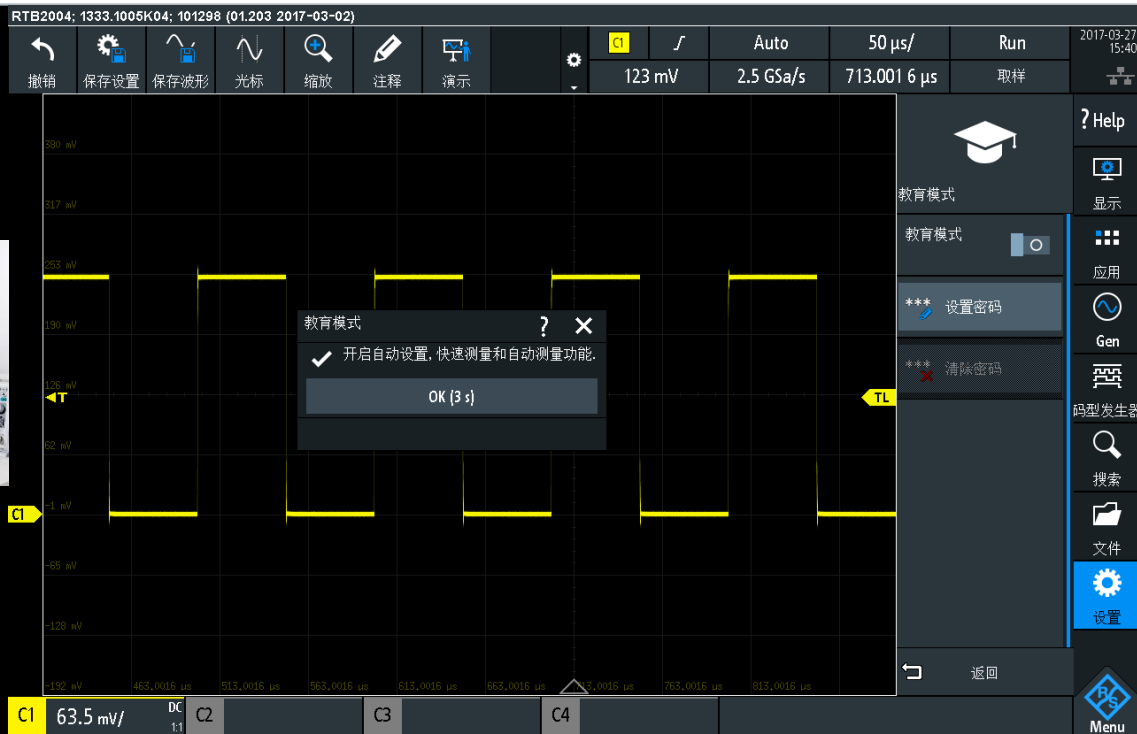
新的维度——易用性



新的维度——演示功能



新的维度——教育模式



R&S®RTB2000

屏幕尺寸比较

10.1“ 高分辨率电容触摸屏，支持手势操作

- 高达2倍的显示区域
- 高达10倍的显示像素
- 智能电容触摸屏
 - 支持手势操作
- 常见的交互界面布局
- 优化波形显示

R&S®RTB2000		10.1“ (1280x800 像素)
K	X2000	8.5“ (800x480 像素)
T	2000B	7“ (432x240 像素)

The R&S®RTB2000

配置信息

第一步、选择基本型号



2 通道 R&S®RTB2002

4 通道 R&S®RTB2004

RTB2000升级满足您需求的增长



谢谢！

