

Broadening the Tektronix Signal Source Portfolio

Cost efficient signal generation



Tektronix[®]

Introducing a Full Featured Bench Top Arbitrary Function Generator for the Value Segment



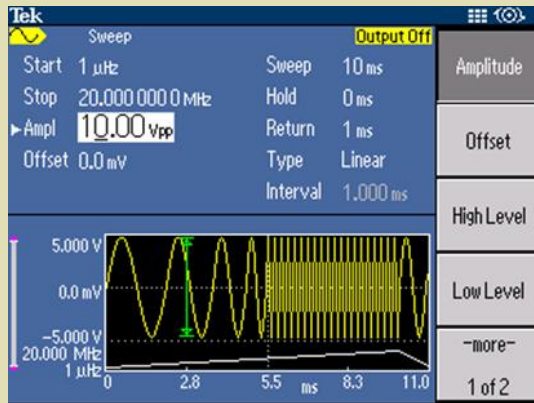
*Proven AFG
Technology for price
sensitive customers!*

**Starting at
\$1,590**

| Model | Bandwidth | Channel | Sample rate | Resolution | Interface | MSRP in US |
|--------------------------|-----------|---------|-------------|------------|------------------------------------|------------|
| AFG2021 | 20MHz | 1 | 250MS/s | 14bit | USB Host & Device | \$1,590 |
| AFG2021 (with GL option) | 20MHz | 1 | 250MS/s | 14bit | USB Host & Device, GPIB and LAN | \$1,690 |

AFG2000 Series Overview

Performance



- Leverages industry leading AFG3000 technology & UI
- 1 μ Hz~20MHz sine
- 250MS/s sample rate
- 1ppm stability
- 14bit vertical resolution
- 10Vpp into 50ohm load

Flexibility



- 12 built-in standard waveforms
- 4 distinct run modes
- Built-in noise generator
- Easily share waveform & set-up data with AFG3000 models

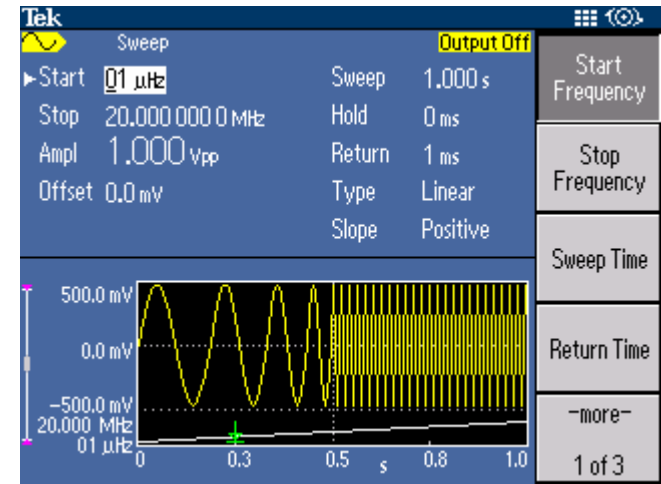
Versatility



- Compact form factor
- Optional GPIB and LAN
- Free ArbExpress and SignalExpress productivity software

Superior Features at an Affordable Price

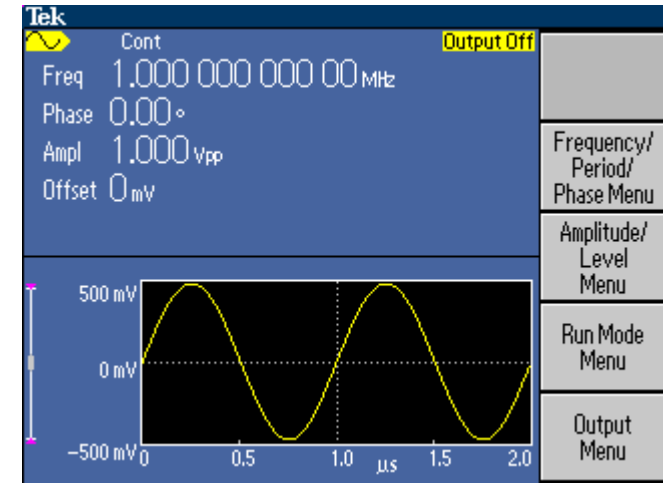
- 20MHz bandwidth
- 14bit vertical resolution
- 250MS/s sample rate
- 12 built-in standard waveforms
- Continues, sweep, modulation and burst modes
- 4×128 KS built-in memory and USB memory expansion for user defined waveforms



Enabling end user to quickly generate simple or complex waveforms to exercise their designs

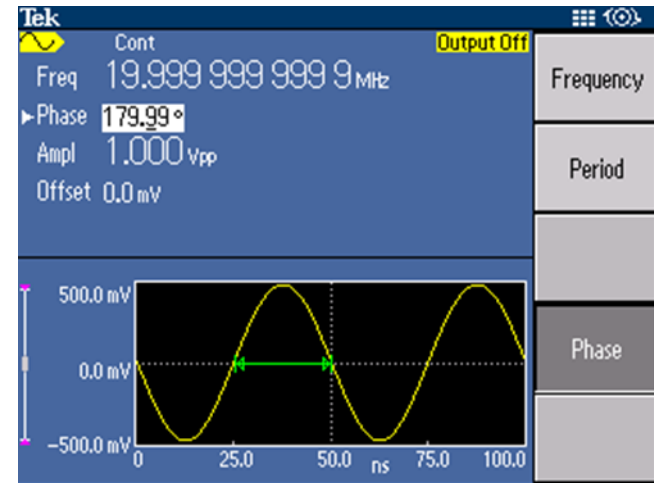
Leveraging Proven AFG3000 Technology

- The innovative ease-of-use features first seen on AFG3000 are the building blocks for the AFG2021
 - A 3.5 in color TFT LCD shows the relevant settings in both graphic and text formats
 - The shortcut buttons and rotary knob allow easy access to the most frequently used settings and functions
- Menu and online help are available in 8 languages
- The AFG3000 customers can migrate to AFG2021 quickly without having to learn a new User Interface



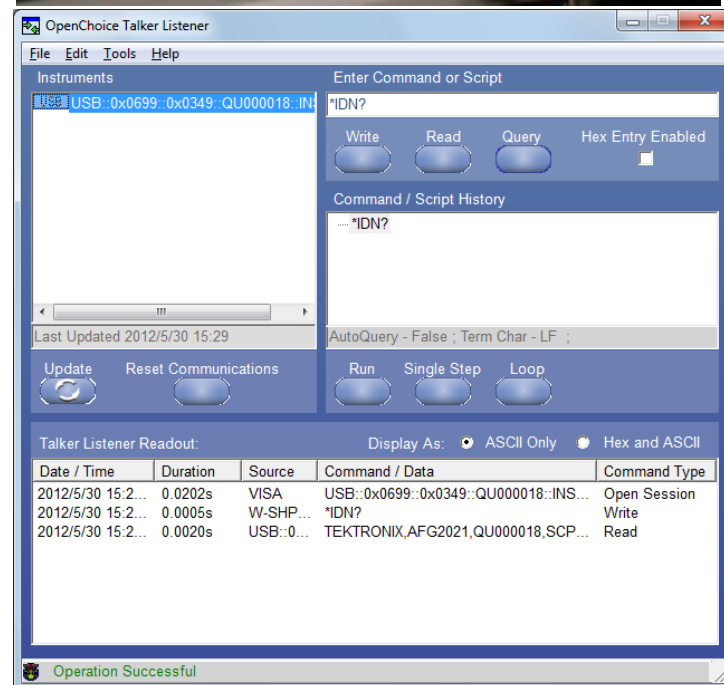
Efficient Shortcuts to High Frequency

- DDS technology enables accurate, easy and on-the-fly changes to frequency and phase characteristics
 - 1uHz to 20MHz sine wave, 1uHz or 12digits frequency resolution
 - $-180^\circ \sim 180^\circ$ phase range, 0.01° resolution
- High stability time base
 - ± 1 ppm internal frequency reference
 - 1ppm per year aging



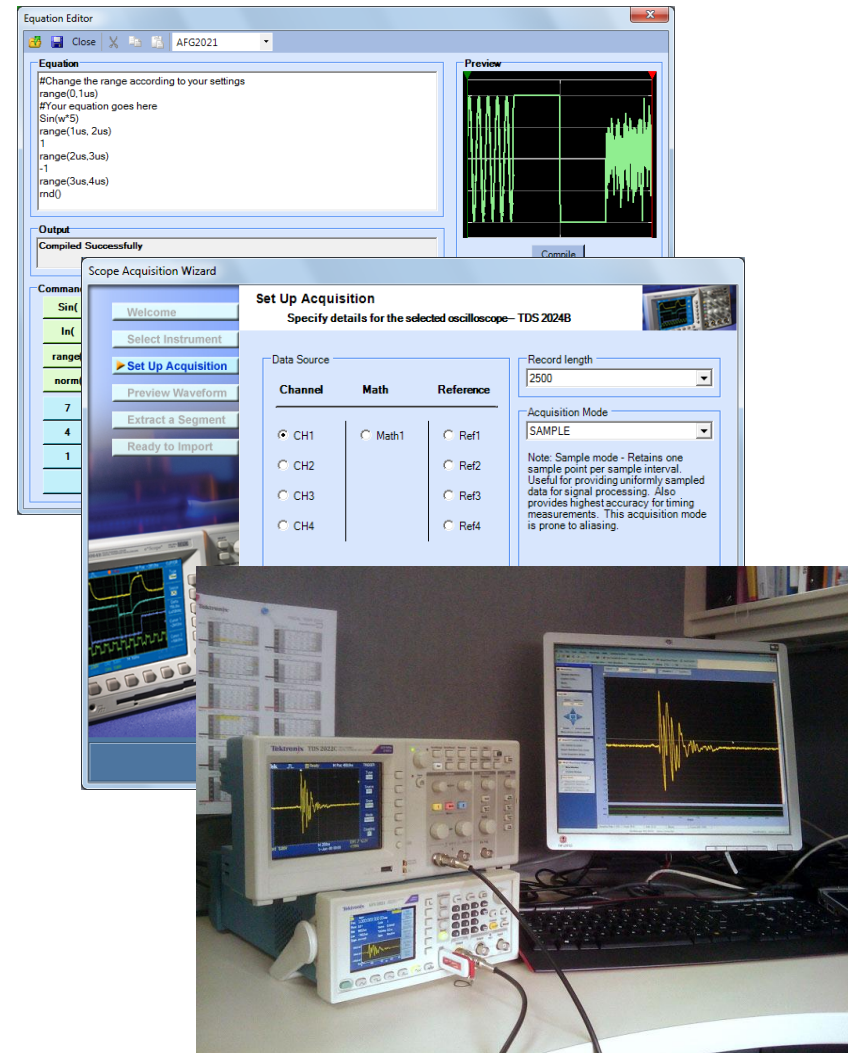
Connectivity

- Standard USB Host and Device, Optional GPIB and LAN
 - Customized waveforms and settings can be saved in USB memory sticks, and recalled for later use, via the front panel USB host socket
 - USB device, GPIB and LAN fulfills the connectivity requirements to download waveforms to the instrument and remote control from a PC



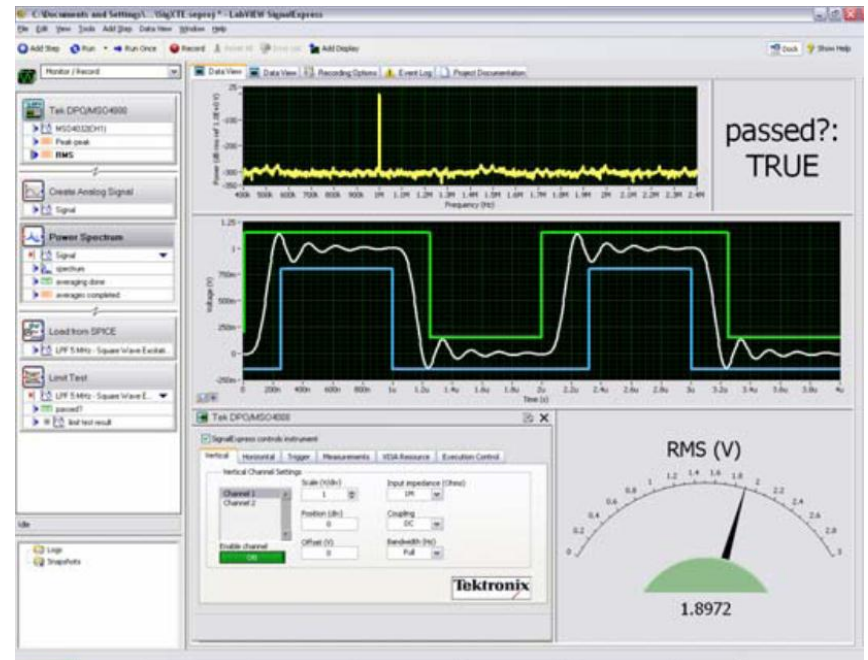
ArbExpress® Real-world Waveform Replication Made Easy

- The ArbExpress waveform editing software ships free with every unit
- Convenient way to create and edit customized waveforms
 - Use standard waveforms as templates
 - Use freehand draw, equation editor or point draw modes
- Compatible to Tek oscilloscopes for direct loading of captured signals onto the host PC
- Download created/captured waveforms to AFG for replication via USB, GPIB or LAN connections.
- Facilitates control the AFG2000 remotely



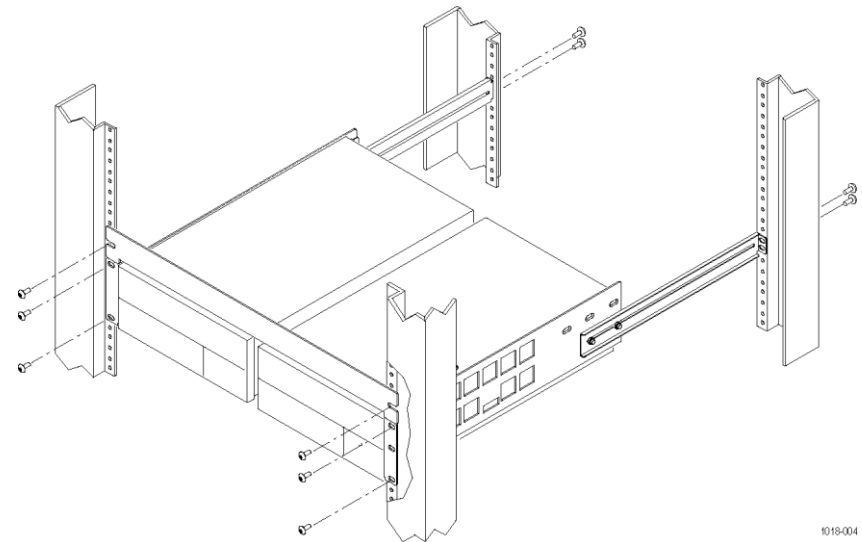
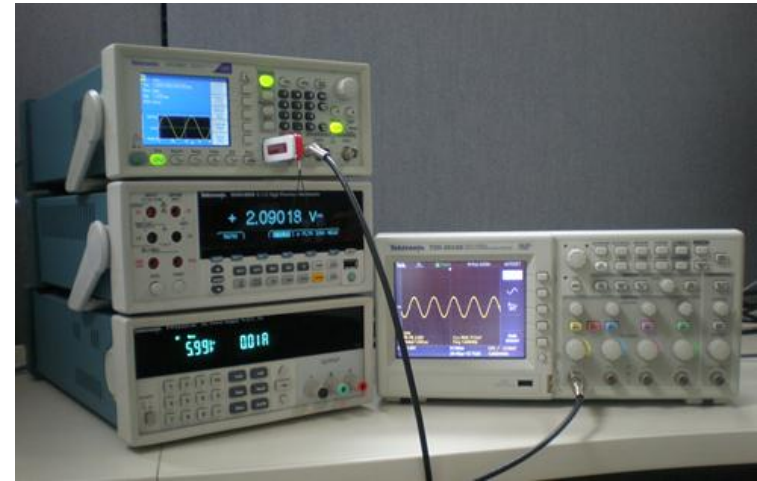
Increase Productivity with SignalExpress

- National Instruments LabVIEW SignalExpress LE version ships free with every unit
- Integrates AFG2021 to the whole Tektronix Bench portfolio
- Intuitive drag-and-drop interface provides an alternative to writing complex software routines
 - Basic instrument control
 - Data logging
 - Data analysis
 - Measurement trending
 - Documentation



Compact Form Factor

- The standard 2U height and half-rack width form factor fits both bench top and rack mount applications
- Stackable
 - Easily stack on other Tektronix bench instruments
 - Save valuable bench top space
- Perfect option for ATE and system integration
 - Available RMU2U rack mount kit simplifies rack mount requirements
 - Full support for GPIB & SCPI command environments



1018-004

Ordering information

■ Base Model Pricing

| Product | Description | US\$ Master Price |
|---------|---|-------------------|
| AFG2021 | Arbitrary/Function Generator, 1-ch, 20MHz, 250MS/s, 14bit | \$1,590 |

■ Configuration Options

| Option | Description | US\$ Master Price |
|--------|-------------------------|-------------------|
| GL | GPIB and LAN interfaces | \$100 |

■ Standard Accessories

| Accessory |
|---|
| User Manual |
| Power Cord |
| USB Cable |
| CD-ROM with Programmer manual and service manual |
| CD-ROM with NI Labview Signal Express and IVI Drivers |
| CD-ROM with ArbExpress Software |
| NIST-Traceable Calibration Certificate |

■ Recommended Accessories

| Item | Description | US MSRP |
|-------------|------------------------------|---------|
| RMU2U | Rackmount kit | \$152 |
| 013-0345-00 | Fuse adapter, BNC-P to BNC-R | \$312 |
| 159-0454-00 | Fuse set, 3 pcs, 0.125 A | \$21 |
| 012-0482-00 | BNC cable shielded, 3 ft | \$206 |
| 012-1256-00 | BNC cable shielded, 9 ft | \$84 |
| 012-0991-00 | GPIB cable, double shielded | \$488 |
| 011-0049-02 | 50Ω BNC Terminator | \$135 |

Options

■ Power Plug Options

| Opt | Description | US MSRP |
|-----|--------------------------|---------|
| A0 | North America | \$0 |
| A1 | Universal Euro | \$0 |
| A2 | United Kingdom | \$0 |
| A3 | Australia | \$0 |
| A5 | Switzerland | \$0 |
| A6 | Japan | \$0 |
| A10 | China | \$0 |
| A11 | India | \$0 |
| A12 | Brazil | \$0 |
| A99 | No power cord or adapter | \$0 |

■ Language Options

| Opt | Description | US MSRP |
|-----|----------------------------|---------|
| L0 | English manual | \$0 |
| L1 | French manual | \$0 |
| L2 | Italian manual | \$0 |
| L3 | German manual | \$0 |
| L4 | Spanish manual | \$0 |
| L5 | Japanese manual | \$0 |
| L6 | Portuguese manual | \$0 |
| L7 | Simple Chinese manual | \$0 |
| L8 | Traditional Chinese manual | \$0 |
| L9 | Korean manual | \$0 |
| L10 | Russian manual | \$0 |
| L99 | No Manual | \$0 |

■ Service Options

| Opt | Description | US MSRP |
|------|--|---------|
| C3 | Calibration service 3 years | \$390 |
| C5 | Calibration service 5 years | \$738 |
| D1 | Calibration data report | \$65 |
| D3 | Calibration data report 3 years (with C3) | \$82 |
| D5 | Calibration data report 5 years (with C5) | \$163 |
| R5 | Repair service 5 years | \$260 |
| R5DW | Repair Service Coverage 5 Years (starts at time of customer instrument purchase) | \$260 |

Key Dates

| Activity | Date |
|-----------------------|-------------------|
| Order Queue Opens | ▪ June 10, 2012 |
| Shipments Begin | ▪ July 03, 2012 |
| Public Announcement * | ▪ August 07, 2012 |

* Product availability: target is 4 weeks.

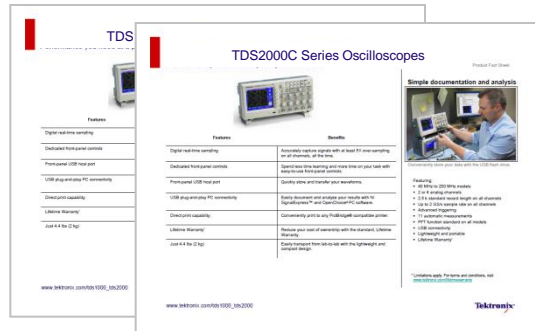
Demos & Training

- Demo Units
 - Distribution channel partners can opt to utilize the AFG2000 as demo for the entire AFG family
- Training
 - Level 1 CDT training and a demo guide will be developed as part of the product launch and will be made available through the Partner net

Demand Generation and Marketing Collateral



Customer Presentation



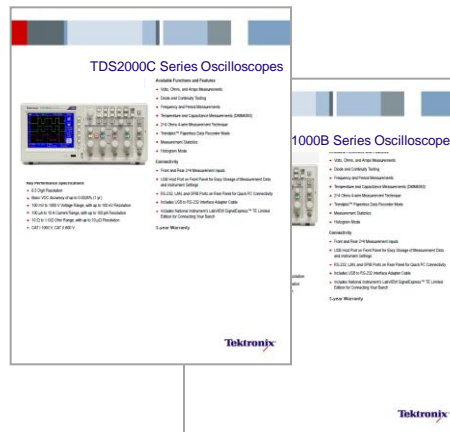
Product Fact Sheets



Product Material Q3



Web Content



Product Datasheets

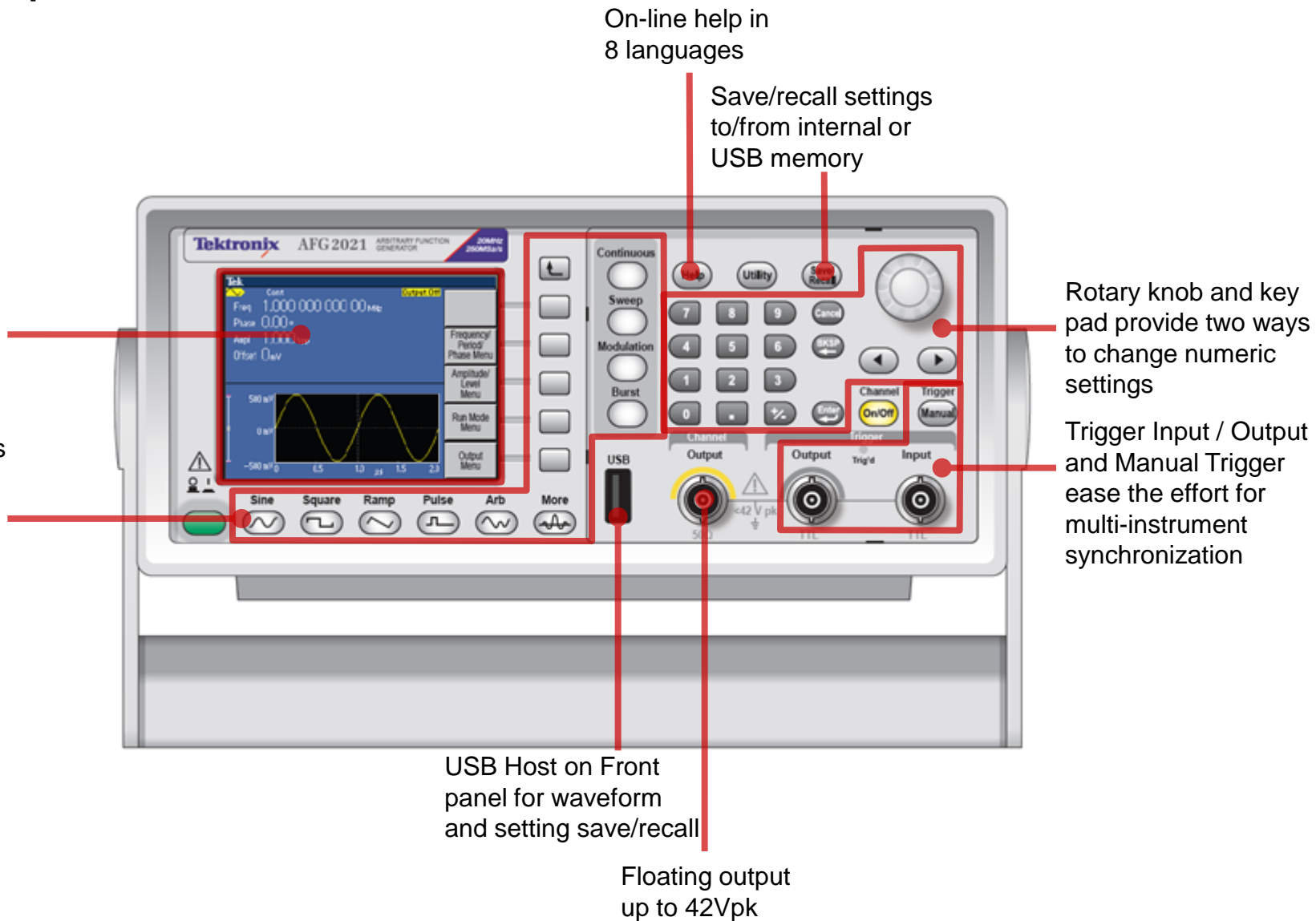


Application Notes Q3

Front panel

3.5" Color TFT LCD Displays waveform and settings in text and graphic

Shortcut buttons for easy access to frequently used functions and settings



Rear panel

- Rear panel of base model



- Rear panel of model with GL option



External
Modulating
Signal Input

External
Reference
Clock Input

GPIB
(optional)

USB
Device (optional)

Ethernet
LAN 10/100 M

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Keithley Instruments, Inc.:](#)

[AFG2021](#) [AFG2021-GL](#)