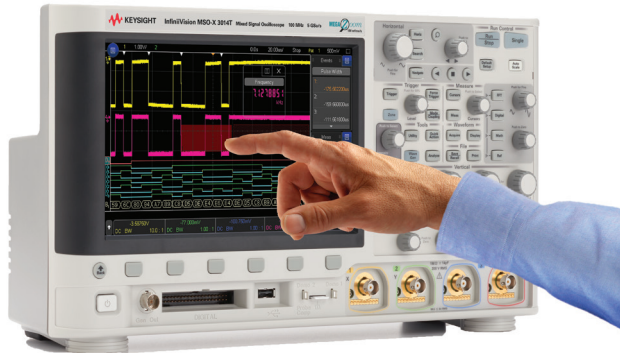


Competitive Comparison

Keysight InfiniiVision 3000T X-Series versus Danaher-Tektronix MDO3000 Series Oscilloscopes



Keysight's 3000T X-Series oscilloscopes simplify the debug process. TOUCH allows you to easily interface with the oscilloscope. An uncompromised update rate over 1M wfms/s increases your ability to DISCOVER infrequent events while the standard hardware based InfiniiScan Zone triggering allows you to isolate the events you DISCOVER. Powerful analysis capabilities make it easier to SOLVE the problem and drive it to root cause. All in a small form factor with excellent cost of ownership.

InfiniiVision 3000T X-Series

Touch

- 8.5 capacitive touch screen
- Designed for touch GUI

Discover

- Uncompromised 1 M wfms/sec update rate
- Exclusive zone touch trigger

Solve

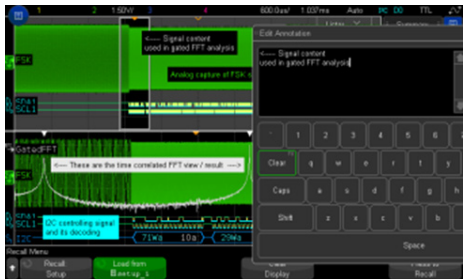
- 6-in-1 instrument integration
- Rich set of application/analysis solutions

| | | Keysight 3000T X-Series | Danaher-Tektronix MDO3000 Series | |
|---------------------------------------|------------------------------|---|---|---|
| Analog Bandwidth | | 100/200/350/500 MHz, 1 GHz | 100/200/350/500 MHz, 1 GHz | |
| | 1 ~ 1.99 mV/div | Up to 1 GHz | √ Up to 150 MHz | x |
| | 2 ~ 4.98 mV/div | Up to 1 GHz | √ Up to 350 MHz | x |
| | 5 ~ 9.98 mV/div | Up to 1 GHz | √ Up to 500 MHz | x |
| Channels | | 2 or 4 analog and 16 digital channels | 2 or 4 analog and 16 digital channels | |
| BW & MSO upgrade | | Yes | Yes | |
| Max sample upgrade | 1 GHz models | 5 GS/s | √ 5 GS/s | √ |
| | ≤ 500 MHz models | 5 GS/s | √ 2.5 GSa/s | x |
| Max memory depth | Normal acquisition | 4 Mpts | x 10 Mpts | √ |
| | Special mode | 4 Mpts (no special mode required) | √ 1 kpts (FastAcq mode) | x |
| Segmented memory | | Standard | √ Not available | x |
| Touch screen | | Capacitive touch | √ Not available | x |
| Hardware zone trigger | | InfiniiScan Zone | √ Not available | x |
| Annotation | | 4 annotations with touch keypad | √ 1 annotation with rotary knob | x |
| Waveform update rate | Normal | > 1,000,000 wfm/second | √ > 60,000 wfm/second | x |
| | Special mode | No special mode required | √ > 280,000 wfm/second (FastAcq mode) | x |
| WaveGen | | Yes, Option | √ Yes, Option | √ |
| 8 digit counter & totalizer | | Option | √ Not available | x |
| Frequency domain | RF frequency range | Up to scope analog BW | x Up to scope analog BW or 3 GHz (opt) | √ |
| | Time/freq domain correlation | Gated FFT | √ Not available | x |
| | Peak search | Standard with lister | √ Standard with no lister | x |
| | Spectrogram | Not available | x Standard | √ |
| | Avg, Max & Min Hold | Standard | √ Standard | √ |
| | RF measurements | Not available | x Ch power, adj ch power ratio, occupied BW | √ |
| Serial protocol decode options | | I ² C, SPI, RS232, CAN, CAN-FD, CAN-dbc, LIN, SENT, I ² S, MIL-STD 1553, ARINC 429, FlexRay | I ² C, SPI, RS232, CAN, LIN, I ² S, MIL-STD 1553, USB2 0, FlexRay | |
| Hardware serial decode & mask testing | | Yes | √ No, software post-processing | x |
| Passive probe | | 500 MHz | x Up to 1 GHz | √ |
| Offline analysis software | | Yes, N8900A Infinii Offline | √ Not available | x |
| Standard calibration cycle | | 3 years | √ 1 year | x |
| Mean time before failure (MTBF) | | > 250,000 hours | √ Not specified | x |

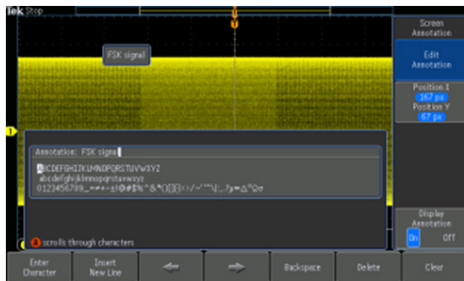
Touch - simplifies the oscilloscope interface



Design for Touch. Capacitive touch screen allows smooth operation of drag, swipe, and more.



Touch keypad increase your annotation productivity.



Tedious rotary knob operation required on MDO3000.



Three-Year Warranty
www.keysight.com/find/ThreeYearWarranty

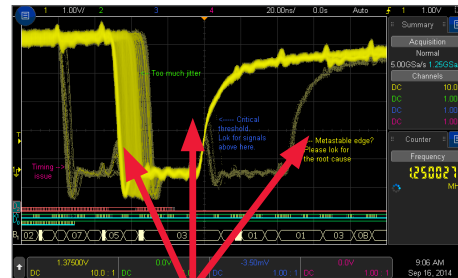


Keysight Assurance Plans
www.keysight.com/find/AssurancePlans



Discover - identify with fast waveform update, isolate with zone

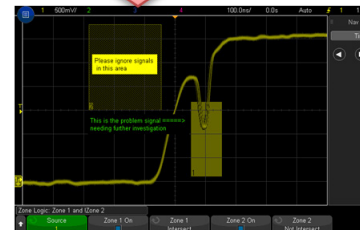
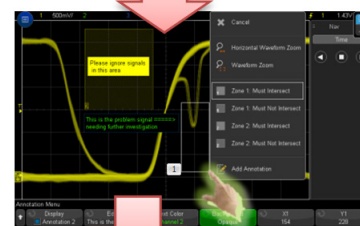
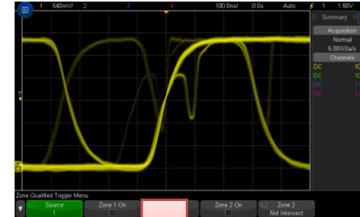
Keysight's 3000T X-Series maintains its industry-leading update rate whether you are using analog channels, digital channels and/or protocol decode. The MDO3000's update rate fluctuates wildly based on what features you are using. From 280 K wfms/s with the FastAcq mode down to 130 wfms/s with digital channels turned on.



Infrequent glitches and signal jitter captured after 1 second on the 3000T X-Series with standard 1M wfms/s update rate.



MDO3000 after 30 seconds with infinite persistence on. It shows limited signal jitter and never sees the glitches due to its compromised update rate.

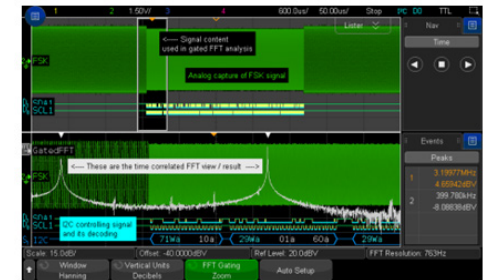


If you can see it, you can trigger on it. With the exclusive "zone" touch trigger, all you need is draw the box around anomalies of interest. No more studying the tedious advanced triggers.

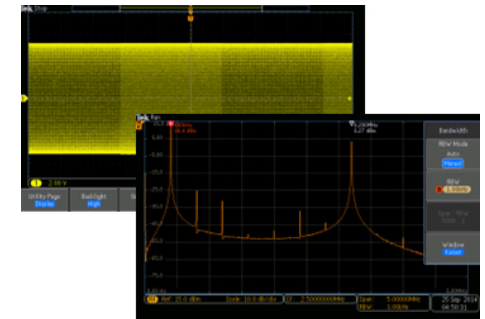


Zone touch trigger is simply not available with MDO3000

Solve - with power analysis capabilities



Trigger with digital channels (I2C in the example), view time domain analog signals, correlate time/frequency domain with the gated FFT function.



Tek MDO3000 can only show the time domain OR frequency domain at a time. No cross domain analysis possible.



Provides class leading 12 low speed serial protocol trigger and decode including new SENT and CAN-FD bus support.

This information is subject to change without notice.
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 Published in USA, November 6, 2014
 5992-0116EN
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