

Industry Comparison Guide: Infiniium 9000 Series vs. Tektronix 7000C Series

Agilent 9000 Series





Tektronix 7000C Series





| | Tektronix DPO 7000C Series | | Agilent Infiniium 9000 Series | |
|--|--|---|---|---|
| Bandwidths Offered | 500MHz, 1 GHz, 2.5 GHz, 3.5 GHz (DSP boosted) | √ | 600 MHz, 1 GHz, 2.5 GHz, 4 GHz | √ |
| Upgradeable bandwidth | No | X | Yes | √ |
| Max sample rate (2-ch) | up to 20 GSa/s | √ | up to 20 GSa/s | √ |
| Standard/Max memory (2-ch) | 25 Mpts/250 Mpts | X | 40Mpts/1 Gpts | √ |
| Scope update rate (table on reverse side) | FastAcq mode to 250k wf/s (limitations) | √ | No DPX mode | X |
| | 36 wf/s with 1 Kpts | X | 1000 wf/s with 1 Kpts | √ |
| | 13 wf/s with 1 Mpts | X | 500 wf/s with 1 Mpt | √ |
| Biggest Display | 12" | X | 15" (40% more display area) | √ |
| Vertical/horizontal knobs: Pushable vernier control | Not offered | X | Yes. All four vertical channel & horizontal knobs. | √ |
| Drag and drop measurements | Not available | X | Yes | √ |
| Triggering stages | 2 HW | √ | 1 HW + 1 SW | X |
| InfiniiScan Zone Triggering | Not available | X | Option. Up to 8 zones | √ |
| Standard Probes | 500 MHz passive | √ | 500 MHz passive | √ |
| Protocol features | decode on waveforms, limited lister only | X | lister, decode on waveforms, multi-tab view, decode entire record, segmented memory support | √ |

| MSO Comparison | Tektronix DPO 7000C Serie | s | Agilent Infiniium 9000 | |
|----------------------------|---------------------------|---|------------------------|---|
| MSO Sample Rate | N. MOO | Х | 2 GSa/s | |
| MSO memory depth (std/max) | No MSO | Х | 128 Mpts/128 Mpts | √ |



Benefits of Large Display Size 15" VS 12" display



Agilent has 40% more display area

- Easier to see signal detail
- 2. Easier to drive (font size)
- 3. Easier for multiple people to see
- Bigger touch screen field for easier control





Benefits of fast update rate

- See infrequent events
- Better view of signal detail
- Responsive controls
- Faster post-processing/analysis

Tek DPX limitations:

Isn't on normally. Doesn't work when MSO channels or protocol is on. Doesn't work with real time mode (switches scope to equivalent time mode). User can't adjust horizontal or vertical controls when stopped (can't zoom in on signal detail). Memory depth limited to 250 kpts. Doesn't work with Math. Doesn't work with Fast Frame.

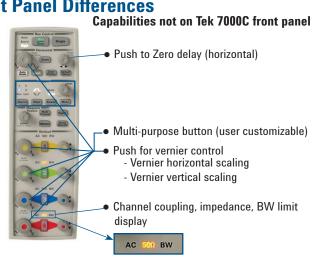
| | Tek 700 | 00C | Agilent | 9000 |
|-----------------------------------|----------|-----------|---------|-----------|
| Scope Waveform/Sec (Memory depth) | | | | |
| 100 Kpts | 34 | X | 550 | $\sqrt{}$ |
| 1 Mpts | 14 | X | 500 | |
| 10 Mpts | 2 | X | 300 | |
| DPX special mode | 250,000* | $\sqrt{}$ | | $\sqrt{}$ |

* tradeoffs listed on left

Ease-of-Use Front Panel Differences



- No pushable knobs.
- No vernier scaling.
- Limited view of channel setup



| | Tektronix 7000C | | Agilent Infiniium 9000 Series | |
|----------------------------------|---|----------|--|--|
| Low-speed protocols | I ² C, SPI, RS-232/UART | | I2C, SPI, RS-232/UART, JTAG | |
| Industrial/auto | CAN/LIN (no LIN triggering) | X | CAN, LIN, FlexRay | |
| Higher-speed buses | 8B/10B, USB (no high-speed triggering) | X | 8B/10B, USB, PCIe, SATA, MIPI | |
| Decode on waveforms | YES | V | YES | |
| Lister | YES (limited) | X | YES | |
| Multi-tab viewer | NO | X | Yes. Header, payload, details, packets | |
| Auto-setup | NO | X | YES | |
| Segmented memory (Fast Frame) | No protocol support | X | YES | |
| Multiple bus decode | YES | Х | YES | |

To obtain additional information about Agilent's Infiniium 9000 Series, go to: www.agilent.com/find/9000

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