

	Tektronix 7 Series DPO	Tektronix 6 Series B MSO	Tektronix DPO70000SX	Keysight Infiniium XR8	Keysight Infiniium UXR-B	Teledyne-LeCroy WaveMaster 8000HD																																																																																																																																	
Specification																																																																																																																																							
Bandwidths	8, 10, 13, 16, 20, 25 GHz	1, 2.5, 4, 6, 8, 10 GHz	33 GHz	8, 10, 13, 16, 20, 25, 33 GHz	10, 13, 16, 20, 25, 33 GHz	6, 8, 13, 16, 20, 25, 33 GHz																																																																																																																																	
Channels	4, 8	4, 6, 8	4 (16 via UltraSync)	4	4 (20-40 via MultiScope)	4 ProBus @ 2 GHz 4 ProAxial @ 33 GHz																																																																																																																																	
ADC Resolution	12-bit	12-bit	8-bit	12-bit	10-bit	12-bit																																																																																																																																	
ENOB (Effective Number of Bits)	<table><tr><td>bits</td><td>7.7</td><td>7.6</td><td>7.3</td><td>7.2</td><td>7.0</td><td>6.7</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td></tr></table> 500 mV FS, 125 GS/s, Signal 80% FS <table><tr><td>bits</td><td>7.5</td><td>7.4</td><td>7.2</td><td>7.1</td><td>6.9</td><td>6.5</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td></tr></table> 500 mV FS, 125 GS/s, Signal 90% FS	bits	7.7	7.6	7.3	7.2	7.0	6.7	GHz	8	10	13	16	20	25	bits	7.5	7.4	7.2	7.1	6.9	6.5	GHz	8	10	13	16	20	25	<table><tr><td>bits</td><td>7.15</td><td>7</td><td>6.85</td><td>6.75</td><td>6.6</td></tr><tr><td>GHz</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr></table> 500 mV FS, Signal 90% FS	bits	7.15	7	6.85	6.75	6.6	GHz	6	7	8	9	10	<table><tr><td>bits</td><td>5.9</td><td>5.8</td><td>5.5</td><td>5.4</td><td>5.2</td><td>5.0</td></tr><tr><td>GHz</td><td>13</td><td>16</td><td>20</td><td>23</td><td>25</td><td>33</td></tr></table> 500 mV FS, Signal 90% FS	bits	5.9	5.8	5.5	5.4	5.2	5.0	GHz	13	16	20	23	25	33	<table><tr><td>bits</td><td>7.6</td><td>7.4</td><td>7.2</td><td>7.1</td><td>6.9</td><td>6.7</td><td>6.4</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 400 mV FS, Signal %FS Unspecified	bits	7.6	7.4	7.2	7.1	6.9	6.7	6.4	GHz	8	10	13	16	20	25	33	<table><tr><td>bits</td><td>7.0</td><td>6.8</td><td>6.7</td><td>6.5</td><td>6.2</td><td>5.9</td></tr><tr><td>GHz</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 400 mV FS, Signal %FS Unspecified	bits	7.0	6.8	6.7	6.5	6.2	5.9	GHz	10	13	16	20	25	33	<table><tr><td>bits</td><td>6.37</td><td>6.07</td><td>5.6</td><td>5.49</td><td>6.14</td><td>5.96</td><td>5.62</td></tr><tr><td>GHz</td><td>6</td><td>8</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> Unspecified FS, Signal 80% FS	bits	6.37	6.07	5.6	5.49	6.14	5.96	5.62	GHz	6	8	13	16	20	25	33																													
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Rise Time (10-90%)	50 ps (8 GHz) to 16 ps (25 GHz)	40 ps (10 GHz)	32 ps (13 GHz) to 13 ps (33 GHz)	55 ps (8 GHz) to 13 ps (33 GHz)	44 ps (10 GHz) to 13 ps (33 GHz)	77 ps (6 GHz) to 15.9/12.6 ps (25/33 GHz)																																																																																																																																	
Vertical Noise ^{1,2} (Small Scale) (rms)	<table><tr><td>µV</td><td>254</td><td>279</td><td>320</td><td>377</td><td>418</td><td>550</td></tr><tr><td>% FS</td><td>0.13%</td><td>0.14%</td><td>0.16%</td><td>0.19%</td><td>0.21%</td><td>0.28%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td></tr></table> 200 mV FS, 125 GS/s	µV	254	279	320	377	418	550	% FS	0.13%	0.14%	0.16%	0.19%	0.21%	0.28%	GHz	8	10	13	16	20	25	<table><tr><td>µV</td><td>412</td><td>457</td><td>501</td><td>549</td><td>602</td></tr><tr><td>% FS</td><td>0.21%</td><td>0.23%</td><td>0.25%</td><td>0.27%</td><td>0.30%</td></tr><tr><td>GHz</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr></table> 200 mV FS	µV	412	457	501	549	602	% FS	0.21%	0.23%	0.25%	0.27%	0.30%	GHz	6	7	8	9	10	<table><tr><td>µV</td><td>990</td><td>1040</td><td>1130</td><td>1140</td><td>1380</td><td>1520</td></tr><tr><td>% FS</td><td>0.50%</td><td>0.52%</td><td>0.57%</td><td>0.57%</td><td>0.69%</td><td>0.76%</td></tr><tr><td>GHz</td><td>13</td><td>16</td><td>20</td><td>23</td><td>25</td><td>33</td></tr></table> 200 mV FS	µV	990	1040	1130	1140	1380	1520	% FS	0.50%	0.52%	0.57%	0.57%	0.69%	0.76%	GHz	13	16	20	23	25	33	<table><tr><td>µV</td><td>300</td><td>323</td><td>370</td><td>403</td><td>460</td><td>533</td><td>646</td></tr><tr><td>% FS</td><td>0.15%</td><td>0.16%</td><td>0.19%</td><td>0.20%</td><td>0.23%</td><td>0.27%</td><td>0.32%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 200 mV FS	µV	300	323	370	403	460	533	646	% FS	0.15%	0.16%	0.19%	0.20%	0.23%	0.27%	0.32%	GHz	8	10	13	16	20	25	33	<table><tr><td>µV</td><td>322</td><td>377</td><td>414</td><td>469</td><td>541</td><td>702</td></tr><tr><td>% FS</td><td>0.20%</td><td>0.24%</td><td>0.26%</td><td>0.29%</td><td>0.34%</td><td>0.44%</td></tr><tr><td>GHz</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 160 mV FS	µV	322	377	414	469	541	702	% FS	0.20%	0.24%	0.26%	0.29%	0.34%	0.44%	GHz	10	13	16	20	25	33	<table><tr><td>µV</td><td>380</td><td>498</td><td>672</td><td>712</td><td>502</td><td>592</td><td>624</td></tr><tr><td>% FS</td><td>0.24%</td><td>0.31%</td><td>0.42%</td><td>0.45%</td><td>0.31%</td><td>0.37%</td><td>0.39%</td></tr><tr><td>GHz</td><td>6</td><td>8</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 160 mV FS	µV	380	498	672	712	502	592	624	% FS	0.24%	0.31%	0.42%	0.45%	0.31%	0.37%	0.39%	GHz	6	8	13	16	20	25	33
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Vertical Noise ^{1,2} (Medium Scale) (rms)	<table><tr><td>mV</td><td>0.523</td><td>0.595</td><td>0.680</td><td>0.743</td><td>0.864</td><td>1.13</td></tr><tr><td>% FS</td><td>0.10%</td><td>0.12%</td><td>0.14%</td><td>0.15%</td><td>0.17%</td><td>0.23%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td></tr></table> 500 mV FS, 125 GS/s	mV	0.523	0.595	0.680	0.743	0.864	1.13	% FS	0.10%	0.12%	0.14%	0.15%	0.17%	0.23%	GHz	8	10	13	16	20	25	<table><tr><td>mV</td><td>0.949</td><td>1.07</td><td>1.15</td><td>1.27</td><td>1.39</td></tr><tr><td>% FS</td><td>0.19%</td><td>0.21%</td><td>0.23%</td><td>0.25%</td><td>0.28%</td></tr><tr><td>GHz</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr></table> 500 mV FS	mV	0.949	1.07	1.15	1.27	1.39	% FS	0.19%	0.21%	0.23%	0.25%	0.28%	GHz	6	7	8	9	10	<table><tr><td>mV</td><td>2.2</td><td>2.17</td><td>2.55</td><td>2.65</td><td>3.15</td><td>3.55</td></tr><tr><td>% FS</td><td>0.44%</td><td>0.43%</td><td>0.51%</td><td>0.53%</td><td>0.63%</td><td>0.71%</td></tr><tr><td>GHz</td><td>13</td><td>16</td><td>20</td><td>23</td><td>25</td><td>33</td></tr></table> 500 mV FS	mV	2.2	2.17	2.55	2.65	3.15	3.55	% FS	0.44%	0.43%	0.51%	0.53%	0.63%	0.71%	GHz	13	16	20	23	25	33	<table><tr><td>mV</td><td>0.76</td><td>0.81</td><td>0.94</td><td>0.981</td><td>1.11</td><td>1.28</td><td>1.54</td></tr><tr><td>% FS</td><td>0.15%</td><td>0.16%</td><td>0.19%</td><td>0.20%</td><td>0.22%</td><td>0.26%</td><td>0.31%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 500 mV FS	mV	0.76	0.81	0.94	0.981	1.11	1.28	1.54	% FS	0.15%	0.16%	0.19%	0.20%	0.22%	0.26%	0.31%	GHz	8	10	13	16	20	25	33	<table><tr><td>mV</td><td>0.701</td><td>0.81</td><td>0.878</td><td>0.975</td><td>1.16</td><td>1.48</td></tr><tr><td>% FS</td><td>0.18%</td><td>0.20%</td><td>0.22%</td><td>0.24%</td><td>0.29%</td><td>0.37%</td></tr><tr><td>GHz</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 400 mV FS	mV	0.701	0.81	0.878	0.975	1.16	1.48	% FS	0.18%	0.20%	0.22%	0.24%	0.29%	0.37%	GHz	10	13	16	20	25	33	<table><tr><td>mV</td><td>0.889</td><td>0.948</td><td>1.28</td><td>1.36</td><td>1.17</td><td>1.31</td><td>1.36</td></tr><tr><td>% FS</td><td>0.22%</td><td>0.24%</td><td>0.32%</td><td>0.34%</td><td>0.29%</td><td>0.33%</td><td>0.34%</td></tr><tr><td>GHz</td><td>6</td><td>8</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 400 mV FS	mV	0.889	0.948	1.28	1.36	1.17	1.31	1.36	% FS	0.22%	0.24%	0.32%	0.34%	0.29%	0.33%	0.34%	GHz	6	8	13	16	20	25	33
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Vertical Noise ^{1,2} (Large Scale) (rms)	<table><tr><td>mV</td><td>1.32</td><td>1.45</td><td>1.67</td><td>1.97</td><td>2.29</td><td>2.97</td></tr><tr><td>% FS</td><td>0.13%</td><td>0.15%</td><td>0.17%</td><td>0.20%</td><td>0.23%</td><td>0.30%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td></tr></table> 1000 mV FS, 125 GS/s	mV	1.32	1.45	1.67	1.97	2.29	2.97	% FS	0.13%	0.15%	0.17%	0.20%	0.23%	0.30%	GHz	8	10	13	16	20	25	<table><tr><td>mV</td><td>2.39</td><td>2.68</td><td>2.94</td><td>3.22</td><td>3.58</td></tr><tr><td>% FS</td><td>0.24%</td><td>0.27%</td><td>0.29%</td><td>0.32%</td><td>0.36%</td></tr><tr><td>GHz</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr></table> 1000 mV FS	mV	2.39	2.68	2.94	3.22	3.58	% FS	0.24%	0.27%	0.29%	0.32%	0.36%	GHz	6	7	8	9	10	<table><tr><td>mV</td><td>4.2</td><td>4.29</td><td>5.04</td><td>5.09</td><td>5.9</td><td>6.8</td></tr><tr><td>% FS</td><td>0.42%</td><td>0.43%</td><td>0.50%</td><td>0.51%</td><td>0.59%</td><td>0.68%</td></tr><tr><td>GHz</td><td>13</td><td>16</td><td>20</td><td>23</td><td>25</td><td>33</td></tr></table> 1000 mV FS	mV	4.2	4.29	5.04	5.09	5.9	6.8	% FS	0.42%	0.43%	0.50%	0.51%	0.59%	0.68%	GHz	13	16	20	23	25	33	<table><tr><td>mV</td><td>1.42</td><td>1.54</td><td>1.75</td><td>1.94</td><td>2.24</td><td>2.6</td><td>3.1</td></tr><tr><td>% FS</td><td>0.14%</td><td>0.15%</td><td>0.18%</td><td>0.19%</td><td>0.22%</td><td>0.26%</td><td>0.31%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 1000 mV FS	mV	1.42	1.54	1.75	1.94	2.24	2.6	3.1	% FS	0.14%	0.15%	0.18%	0.19%	0.22%	0.26%	0.31%	GHz	8	10	13	16	20	25	33	<table><tr><td>mV</td><td>1.44</td><td>1.58</td><td>1.75</td><td>1.92</td><td>2.24</td><td>2.91</td></tr><tr><td>% FS</td><td>0.18%</td><td>0.20%</td><td>0.22%</td><td>0.24%</td><td>0.28%</td><td>0.36%</td></tr><tr><td>GHz</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 800 mV FS	mV	1.44	1.58	1.75	1.92	2.24	2.91	% FS	0.18%	0.20%	0.22%	0.24%	0.28%	0.36%	GHz	10	13	16	20	25	33	<table><tr><td>mV</td><td>1.7</td><td>2.04</td><td>2.55</td><td>2.63</td><td>2.32</td><td>2.59</td><td>2.72</td></tr><tr><td>% FS</td><td>0.21%</td><td>0.26%</td><td>0.32%</td><td>0.33%</td><td>0.29%</td><td>0.32%</td><td>0.34%</td></tr><tr><td>GHz</td><td>6</td><td>8</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 800 mV FS	mV	1.7	2.04	2.55	2.63	2.32	2.59	2.72	% FS	0.21%	0.26%	0.32%	0.33%	0.29%	0.32%	0.34%	GHz	6	8	13	16	20	25	33
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Vertical Noise ^{1,2} (Very Large Scale) (rms)	<table><tr><td>mV</td><td>5.01</td><td>5.5</td><td>6.48</td><td>7.55</td><td>8.53</td><td>10.3</td></tr><tr><td>% FS</td><td>0.10%</td><td>0.11%</td><td>0.13%</td><td>0.15%</td><td>0.17%</td><td>0.21%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td></tr></table> 5V FS, 125 GS/s	mV	5.01	5.5	6.48	7.55	8.53	10.3	% FS	0.10%	0.11%	0.13%	0.15%	0.17%	0.21%	GHz	8	10	13	16	20	25	<table><tr><td>mV</td><td>19</td><td>21.1</td><td>23.1</td><td>25</td><td>27.4</td></tr><tr><td>% FS</td><td>0.19%</td><td>0.21%</td><td>0.23%</td><td>0.25%</td><td>0.27%</td></tr><tr><td>GHz</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr></table> 10 V FS	mV	19	21.1	23.1	25	27.4	% FS	0.19%	0.21%	0.23%	0.25%	0.27%	GHz	6	7	8	9	10	<table><tr><td>mV</td><td>25.74</td><td>26.65</td><td>29.53</td><td>29.65</td><td>35.04</td><td>39.82</td></tr><tr><td>% FS</td><td>0.43%</td><td>0.44%</td><td>0.49%</td><td>0.49%</td><td>0.58%</td><td>0.66%</td></tr><tr><td>GHz</td><td>13</td><td>16</td><td>20</td><td>23</td><td>25</td><td>33</td></tr></table> 6 V FS	mV	25.74	26.65	29.53	29.65	35.04	39.82	% FS	0.43%	0.44%	0.49%	0.49%	0.58%	0.66%	GHz	13	16	20	23	25	33	<table><tr><td>mV</td><td>6.22</td><td>6.85</td><td>8.3</td><td>8.78</td><td>10.3</td><td>12.1</td><td>14.9</td></tr><tr><td>% FS</td><td>0.12%</td><td>0.14%</td><td>0.17%</td><td>0.18%</td><td>0.21%</td><td>0.24%</td><td>0.30%</td></tr><tr><td>GHz</td><td>8</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 5 V FS	mV	6.22	6.85	8.3	8.78	10.3	12.1	14.9	% FS	0.12%	0.14%	0.17%	0.18%	0.21%	0.24%	0.30%	GHz	8	10	13	16	20	25	33	<table><tr><td>mV</td><td>14.1</td><td>15.5</td><td>17.2</td><td>19.2</td><td>22.3</td><td>28.8</td></tr><tr><td>% FS</td><td>0.18%</td><td>0.19%</td><td>0.22%</td><td>0.24%</td><td>0.28%</td><td>0.36%</td></tr><tr><td>GHz</td><td>10</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 8 V FS	mV	14.1	15.5	17.2	19.2	22.3	28.8	% FS	0.18%	0.19%	0.22%	0.24%	0.28%	0.36%	GHz	10	13	16	20	25	33	<table><tr><td>mV</td><td>16.81</td><td>19.7</td><td>25.5</td><td>26</td><td>21.95</td><td>-</td><td>-</td></tr><tr><td>% FS</td><td>0.21%</td><td>0.25%</td><td>0.32%</td><td>0.33%</td><td>0.27%</td><td>-</td><td>-</td></tr><tr><td>GHz</td><td>6</td><td>8</td><td>13</td><td>16</td><td>20</td><td>25</td><td>33</td></tr></table> 8 V FS	mV	16.81	19.7	25.5	26	21.95	-	-	% FS	0.21%	0.25%	0.32%	0.33%	0.27%	-	-	GHz	6	8	13	16	20	25	33
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Intrinsic Jitter (Aperture Uncertainty) (rms)	<table><tr><td>1 µs</td><td>10 µs</td><td>100 µs</td><td>1 ms</td></tr><tr><td>60 fs</td><td>70 fs</td><td>70 fs</td><td>70 fs</td></tr></table>	1 µs	10 µs	100 µs	1 ms	60 fs	70 fs	70 fs	70 fs	<table><tr><td>1 µs</td><td>-</td><td>-</td><td>1 ms</td></tr><tr><td>80 fs</td><td>-</td><td>-</td><td>130 fs</td></tr></table>	1 µs	-	-	1 ms	80 fs	-	-	130 fs	<table><tr><td>-</td><td>10 µs</td><td>-</td><td>-</td></tr><tr><td>-</td><td>100 fs</td><td>-</td><td>-</td></tr></table>	-	10 µs	-	-	-	100 fs	-	-	<table><tr><td>1 µs</td><td>10 µs</td><td>100 µs</td><td>1 ms</td></tr><tr><td>13 fs</td><td>18 fs</td><td>24 fs</td><td>38 fs</td></tr></table>	1 µs	10 µs	100 µs	1 ms	13 fs	18 fs	24 fs	38 fs	<table><tr><td>1 µs</td><td>10 µs</td><td>100 µs</td><td>1 ms</td></tr><tr><td>15 fs</td><td>25 fs</td><td>40 fs</td><td>50 fs</td></tr></table>	1 µs	10 µs	100 µs	1 ms	15 fs	25 fs	40 fs	50 fs	<table><tr><td>1 µs</td><td>10 µs</td><td>100 µs</td><td>1 ms</td></tr><tr><td>15 fs</td><td>28 fs</td><td>32 fs</td><td>33 fs</td></tr></table>	1 µs	10 µs	100 µs	1 ms	15 fs	28 fs	32 fs	33 fs																																																																																	
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Sample Rate	125 GS/s (4 ch), 62.5 GS/s (8 ch)	50 GS/s (2 ch), 25 GS/s (4 ch), 12.5 GS/s (8 ch)	100 GS/s (2 ch), 50 GS/s (4 ch)	128 GS/s	128 GS/s	80 GS/s (4 ch, 6-33 GHz) 160 GS/s (2 ch, 50-65 GHz) <i>"Enhanced Sample Rate"</i> similar to Tek's IT mode (Interpolated Time)																																																																																																																																	
Record Length Std / Opt	500 Mpoints / 2 Gpoints	62.5 Mpoints / 1 Gpoints	62.5 Mpoints / 1 Gpoints	1 Gpoints / 8 Gpoints	500 Mpoints / 2 Gpoints	200 Mpoints / 8 Gpoints																																																																																																																																	
Maximum Waveform Capture Rate (wfms/s)	>150,000 (4 ch simultaneously w/ FastAcq™)	>500,000 (4 ch simultaneously w/ FastAcq™)	> 300,000 (4 ch simultaneously w/ FastAcq™)	N/A	N/A	N/A																																																																																																																																	
Maximum segmented memory (record length) acquisition rate	>30,000,000 (4 ch simultaneously w/ FastFrame™)	>5,000,000 (4 ch simultaneously w/ FastFrame™)	> 310,000 (4ch simultaneously w/ FastFrame™)	N/A	> 285,700 (4ch simultaneously w/ segmented memory)	>900,000 (4ch simultaneously w/ Sequence Mode)																																																																																																																																	
Edge Trigger Bandwidth	8 GHz to 25 GHz (digital)	1 GHz to 10 GHz (digital)	>25 GHz (analog)	8 GHz to 33 GHz (digital)	10 GHz to 33 GHz (digital)	<=15 GHz																																																																																																																																	
Complex Trigger Bandwidth	25 GHz (digital)	10 GHz (digital)	> 25 GHz (analog)	Unspecified (analog)	Unspecified (analog)	Unspecified																																																																																																																																	
Pulse Trigger Minimum Detectable Pulse Width	< 32 ps	160 ps	< 40 ps	50 ps	50 ps	200 ps																																																																																																																																	
Trigger Jitter (rms)	10 fs	≤ 1.5 ps	10 fs	Unspecified	116 fs	< 0.1 ps																																																																																																																																	
Trigger Latency (Ext Trig)	Low-latency: <20 ns – Ch 1 (25 GHz) & Aux In (8 GHz) Normal: 1.9 µs – Ch1-4 (25 GHz) & Aux In (8 GHz)	1.1 µs	< 30 ns	Unspecified	Unspecified	Unspecified																																																																																																																																	
Bit Error Detector (NRZ)	26.6 Gbps	N/A	14.1 Gbps	N/A	N/A	N/A																																																																																																																																	
Digital (MSO) Channels	N/A	Up to 64 (requires TLP058 8 ch logic probe)	N/A	N/A	N/A	16 (internal) 18 (external box)																																																																																																																																	
Digital (MSO) Sample Rate	N/A	50 GS/s (2 ch), 25 GS/s (4 ch), 12.5 GS/s (8 ch)	N/A	N/A	N/A	2.5 GS/s (internal) 12.5 GS/s (external box)																																																																																																																																	
Measurement Analysis & Application Solutions	Refer to Oscilloscope Selection Guide (46W-31080-xx)	Refer to Oscilloscope Selection Guide (46W-31080-xx)	Refer to Oscilloscope Selection Guide (46W-31080-xx)	Refer to Keysight website	Refer to Keysight website	Refer to Teledyne LeCroy website																																																																																																																																	
Connectivity	10G LAN (SFP+) and 1G LAN	1G LAN	1G LAN	1G LAN	1G LAN	2.5G LAN																																																																																																																																	
Storage	Removeable 1.6 TB NVME (PCIe) SSD	Removeable 250 GB SATA SSD	Removeable 900 GB SATA SSD	Removeable 960 GB SATA SSD	Removeable 960 GB SATA SSD	Removeable (unspecified) GB SATA SSD																																																																																																																																	
Display	15.6" 1080p (1920x1080) w/ capacitive touch	15.6" 1080p (1920x1080) w/ capacitive touch	6.5" XGA (1024x768) w/ resistive touch	15.6" 1080p (1920x1080) w/ capacitive touch	15.4" XGA (1024x768) w/ capacitive touch	15.6" 1080p (1920x1080) w/ capacitive touch																																																																																																																																	
Operating System	Embedded (std) or Windows 10 (opt)	Embedded (std) or Windows 10 (opt)	Windows 10	Windows 11	Windows 11	Windows 11																																																																																																																																	

1-Full scale is defined by each vendor with following number of vertical divisions:
Tektronix - 10
Keysight – 8 or 10
LeCroy – 8

2-Vertical Noise (rms) provided with both actual specified values from vendor's datasheet and as a % Full scale to normalize the vertical noise to enable comparisons between each vendor's scope given the difference in how each vendor defines Full scale.
% FS is calculated for a given V/div setting by dividing the vertical noise (rms) by the V/div setting. For example, for the 7 Series DPO, at 500 mV/div FS, 125 GS/s (Medium Scale), Tektronix specifies 1.13 mV vertical noise @ 25 GHz or 1.13 mv / 500 mV FS or 0.23% FS.

9-1-2026 5W-74190-2