| SPEC\MODEL | | OS-9020 | OS-5100 | OS-8100A |
|---|---|---|---|---|
| CRT | Configuration and Useful Screen | 6-inch rectangular screen with internal graticule:8X10div (1div=1cm) | | |
| | Acceleration Potential | +1.9Kv approx (Ref. Cathode) | +10.5Kv approx (Ref. Cathode) | +19Kv approx |
| | Prosphor | P31(Standard) | | |
| | Focusing | Possible | | |
| | Trace Rotation | Provided | | |
| | Intensity Control | Provided | | |
| Z-AXIS INPUT (INTENSITY MODULATION) | Input Signal | Positive going signal decreases intensity +5Vp-p or more signal cases noticeable modultaion at normal intensity settings | | |
| | Bandwidth | DC-2MHz(-3dB) | DC-3.5MHz(-3dB) | |
| | Coupling | DC | | |
| | Input Impedence | 20kΩ-30kΩ | 25kΩ | 15kΩ |
| | Maximum Input Voltage | 30V(DC+peak AC) | 20V(DC+peak AV) | |
| VERTICAL DEFLECTION (CH1, CH2) | Bandwidth | DC(10Hz) to 20MHz normal(CH1 only) DC(10MHz) to 10MHz magnified(CH1 only) | DC(10Hz) to 100MHz. DC(10Hz) to 20MHz(2mV Range) | DC(10Hz) to 100MHz. DC(10Hz) to 10MHz(x5 Mag on) |
| | Model | CH1, CH2, ADD, DUAL(CHOP:Time div switch 0.2s to 5ms, ALT:Time/div switch 2ms to 0.2us) | CH1, CH2, ADD, ALT, CHOP | CH1, CH2, CH3, ADD, ALT, CHOP |
| | Deflection Factor | 5mV/div to 5V in 10 calibrated steps of a 1-2-5 sequence. Continuously variable between steps at least 1:2.5(x5 Mag:1mV/div in 10 claibrted steps) | 2mV/div to 5V/div in 11 calibrated steps of 1-2-5 sequence | 5mV/div to 5V/div 1mV/div to 1V/div (x5 Mag on) in 10 calibrated steps of 1-2-5 sequence |
| | Accuracy | Normal:±3% Magnified:&plus5% | ±3% | |
| | Input Imepedence | Approx. 1MΩ in parallel with 25pF | | |
| | Input Coupling | DC-GND-AC | DC-GND-AC | DC-GND-AC |
| | Rise Time | 17.5ns or less(35ns or less: x5) | 3.5ns or less | 3.5ns or less(35ns or less: x5Mag on) |
| | CH1 Out | 25mV/div ±20% into 50Ω:20Hz to 10MHz(-3dB)-AC coupling | DC to 30MHz(-3dB) | 20mV/div into 50Ω:DC to 10MHz(-3dB) |
| | Polarity Inversion | CH2 Only | | |

| | | | | |
|---|---|---|---|---|
| | Signal Delay Time | | delay cable supplied | |
| | Maximum Input Voltage | Direct:250V(DC+peak AC), with probe: refer to prove specification | 250(DC+peak AC) or (400Vp-p at 1KHz or less) | |
| **VERTICAL DEFLECTION(CH3 FOR OS-8100A ONLY)** | Deflection Factor | | | 0.1V/div to 1V/div |
| | Bandwidth(-3dB) | | | DC(10Hz) to 70MHz |
| | Rise Time | | | 5ns or less |
| | Accuracy | | | ±5% |
| | Input Impedence | | | 1MΩ |
| | Maximum Input Voltage | | | 250V(DC+peak AC) |
| **HORIZONTAL DEFLECTION** | Sweep Mode | A, X-Y | A, A INT B, B TRIG'D, X-Y | A, ALT, B, B TRIG'D, X-Y |
| | Time Base A | 0.2µs/div to 0.2s/div in 19 calibrated steps of 1-2-5 sequence uncalibrated continuous control between steps at least 1:2.5 | 0.1µs/div to 0.2s/div in 20 calibrated steps of 1-2-5 sequence | 20ns/div to 0.5s/div in 23 calibrated steps of 1-2-5 sequence |
| | Hold off Time | | Variable with hold-off control | |
| | Time Base B | | 0.1µs/div to 10µs/div in 7 calibrated steps of 1-2-5 sequence | 2ns/div to 0.5s/div in 23 calibrated steps of 1-2-5 sequence |
| | Delay sweep position | | 1 div or less to 10div or more | |
| | Delay Time Jitter | | better than 20,000:1 | |
| | Sweep Magnification | 10 times(maximum sweep rate:20ns/div) | 10 times(maximum sweep rate:10ns/div) | 10 times(maximum sweep rate:2ns/div) |
| | Accuracy | ±3%, ±5%(o°C to 40°C), addtional error for magnifier ±2% 50nS/div, 20nS/div(X 10 position)±10% | ±3%, (addtional error for magnifier:2%) | ±3%, (±5%: X 10 Mag On) |
| **TRIGGER SYSTEM** | Modes | Auto, Norm, TV-V, TH-H | | |
| | Source | INT(CH1, CH2, Vert mode), line, ext | CH1, CH2, line, ext | CH1, CH2, CH3(ext), line |
| | Coupling | AC | AC | AC, HF-REJ, DC, TV-V, TV-H |
| | Slope | + or - | | |
| | Sensitivity and frequency Auto, Norm | 20Hz-2MHz / 2MHz-30MHz<br>INT: 0.5(2.0)div / 2.0(3.0)div<br>EXT: 0.2Vp-p / 0.8Vp-p<br>( )vert mode | DC to 10MHz / 10MHz-100MHz<br>INT: 0.5div / 1.5div<br>EXT: 0.1Vp-p / 0.3Vp-p<br>Vert: 1.5div / 3.0div | DC to 10MHz / 10MHz-100MHz<br>INT: 0.3div / 1.0div<br>EXT: 0.5Vp-p / 0.15Vp-p |
| | TV-V, TV-H | at least 1div or 1.0Vp-p | | |

<table>
<tr><td></td><td>Maximum Input Voltage</td><td></td><td>250V(DC+peak AC)</td><td>300V(DC+peak AC)</td></tr>
<tr><td rowspan="3">X-Y OPERATION</td><td>X-Y Phase Difference</td><td>3° or less(at DC to 50kHz)</td><td>3° or less(at DC to 100kHz)</td><td>3° or less(at DC to 2MHz)</td></tr>
<tr><td>Sensitivity</td><td colspan="3">same as vertical deflection for both X-axis (CH1) and Y-axis(CH2)</td></tr>
<tr><td>X-axis Bandwidth</td><td>DC to 500kHz(-3dB)</td><td colspan="2">DC to 2MHz(-3dB)</td></tr>
<tr><td>CALIBRATOR</td><td>Probe Adjustment</td><td>1kHz(±20%)frequency, 0.5V(±10%) seuare wave, duty ratio:40-60%</td><td colspan="2">1KHz square wave, 0.5Vp-p ±1%, duty ratio:50%</td></tr>
<tr><td rowspan="3">POWER SUPPLY</td><td>Line Voltage Range</td><td colspan="3"><table><tr><th>Voltage Range</th><th>Fuse</th></tr><tr><td>00(90-110)/AC</td><td>2A250V</td></tr><tr><td>120(108-132V)/AC</td><td>2A250V</td></tr></table><table><tr><th>Voltage Range</th><th>Fuse</th></tr><tr><td>00(90-110)/AC</td><td>2A250V</td></tr><tr><td>120(108-132V)/AC</td><td>2A250V</td></tr></table></td></tr>
<tr><td>Line Frequency</td><td colspan="3">50/60Hz</td></tr>
<tr><td>Porwer Consumption</td><td>approx. 35W</td><td>approx. 55W</td><td>approx. 60W</td></tr>
<tr><td rowspan="2">PHYSICAL CHARACTERISTIC</td><td>Weight</td><td>7.5kg</td><td>8.5kg</td><td>10kg</td></tr>
<tr><td>size</td><td colspan="2">320mm(W) x 140mm(H) x 430mm(D)</td><td>330mm(W) x 165mm(H) X 420mm(D)</td></tr>
<tr><td>OTHERS</td><td>Accessories Supplied</td><td colspan="3">Operator's manual 1 Spare fuse 2<br>Power cord 1 Probe(option) 2</td></tr>
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