

## 10. SPECIFICATIONS

	V-1585 V-1085	V-1565 V-1065A	V-1560 V-1060	V-695 V-665A	V-660
CRT					
Graticule	6-inch screen with internal graticule 0%, 10%, 90% and 100% markers 8 x 10 DIV (1 DIV = 1cm)	←	←	←	←
Phosphor	P31	←	←	←	←
Accelerating potential	17kV approx.	←	←	12kV approx.	←
External intensity modulation	Coupling: DC coupling Voltage: 5V or more Maximum input voltage: 30V (DC + AC peak or 30Vp-p AC at 1kHz or less Bandwidth: DC to 5MHz	←	←	←	←
Vertical deflection system					
Sensitivity	<CH1 and CH2 > 2mV/DIV to 5V/DIV ±3% (switchable in 11 steps) Continuously variable	←	←	←	←
	<CH3 and CH4 > 0.1V/DIV and 0.5V/DIV ±3% selectable	Not provided	←	←	←

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Bandwidth	DC to 100MHz -3dB 2mV/DIV: DC to 20MHz -3dB AC low pass:10Hz	←	←	DC ~60MHz DC ~10MHz	←
Rise time	3.5ns approx. 2mV/DIV: 17.5ns approx.	←	←	5.9ns approx. 35ns approx.	←
Delay time	Leading edge can be monitored	←	←	←	←
Maximum input voltage	400V (DC + AC peak) at 1kHz or less	←	←	←	←
Input coupling	<CH1 and CH2 > AC, DC, GND	←	←	←	←
	<CH3 and CH4 > AC, DC	Not provided	←	←	←
Input impedance	1M ohms + 1.5%, 23pF approx.	←	←	←	←
Display modes	CH1, CH2, DUAL, CHOP (250kHz approx.) QUAD, ADD (DIFF mode can be established when the CH2 is in the INVERT mode.)	QUAD mode is not provided	←	←	←
Bandwidth limiting function	20MHz	←	←	10MHz	←
Polarity selection	± (CH2 only)	←	←	←	←

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Common-mode rejection ratio	20dB minimum at 20MHz	←	←	10MHz	←
X-Y operation	X-axis, Y-axis selectable	←	←	←	←
Sensitivity	X axis	←	←	←	←
	CH1, CH2	2mV to 5V/div ± 5%	←	←	←
	CH3, CH4	0.1V, 0.5V/div ± 5%	←	←	←
		Not provided	←	←	←
		EXT 0.1V/div ± 5% EXT ÷ 10 1V/div ± 5%	←	←	←
Phase error	Y axis 2mV to 5V/DIV ± 3%	←	←	←	←
X bandwidth	3° or less from DC to 50kHz DC to 500kHz (-3dB)	←	←	←	←
Horizontal deflection system					
Trigger mode	Norm trigger, auto trigger	←	←	←	←
Sweep mode	Main sweep, continuous delay sweep, alternate sweep, single sweep	←	←	←	←
Trigger source	A: CH1, CH2, ALT, CH3, CH4 LINE (ALT is available at NORM trigger) B: Follows A sweep.	CH1, CH2, EXT (AC, DC, DC ÷ 10), LINE	←	←	←

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TV trigger	Exclusive sync separator circuit provided Sync polarity: -	←	←	←	←
Trigger sensitivity					
NORM mode	See table 10-1	See table 10-2	←	See table 10-3	←
AUTO mode	See table 10-4	See table 10-5	←	See table 10-6	←
TV mode	Sync signal INT:1div or more	INT: 1div or more EXT: 200mVp-p or more	←	←	←
Trigger level: Variable range					
AUTO	Automatically corresponds to the trigger signal	←	←	←	←
NORM	± 4DIV or more	INT: ± 4div or more EXT: ± 0.4V or more EXT: ÷ 10 ± 4V or more	←	←	←
Slope	±	←	←	←	←
External input impedance	Not provided	1MΩ ± 5%, 25pF ± 6pF	←	←	←

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External input voltage	Not provided	400V(DC + AC peak) at 1kHz	←	←	←
Sweep time A(main) sweep	50ns/DIV to 0.5s/DIV	←	←	←	←
B(delay) sweep	Continuously variable (UNCAL) 50ns/DIV to 50ms/DIV				
Accuracy					
		10 to 35°C	0 to 50°C		
	X1	±3 %	±4 %		
	MAG x 10	±4 %	±6 %		
Sweep magnification	X10	←	←	←	←
Maximum sweep rate	5ns/DIV	←	←	←	←
Hold off time	Variable	←	←	←	←
Delay time	1 μs to 5s	←	←	←	←
Delay jitter	1/20,000 or less	←	←	←	←
Alternate separation	Variable	←	←	←	←
Trigger lock function	Provided	←	←	←	←
Auto range function	Provided	←	←	←	←

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Single sweep function	Provided	←	←	←	←
Frequency counter Frequency measurement	Source: A trigger signal	←	Not provided	Same as V-1585, V-1085	Not provided
Measuring range	20Hz to 100MHz See table 10-7	50Hz to 100MHz See table 10-8	Not provided	50Hz to 60MHz See table 10-9	Not provided
Time base error (15°C to 35°C)	100PPM See table 10-7	100PPM See table 10-8	Not provided	100PPM See table 10-9	Not provided
Memory backup function	The panel condition can be maintained for 48 hours or more after the power switch is turned to OFF.	Not provided	←	←	←
Readout function (Panel setting display)	Vertical axis: V/DIV (CH1, CH2), UNCAL, probe conversion Sweep speed: S/DIV, UNCAL, MAG(converted value) Other: Delay time	←	Not provided	Same as V-1585, V-1085	Not provided
Cursor readout function	Voltage difference $\Delta V$ : $\Delta$ -REF Time difference $\Delta T$ : $\Delta$ -REF	←	Not provided	Same as V-1585, V-1085	Not provided

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Cursor readout function	Frequency 1/ΔV: Δ-REF	←	Not provided	Same as V-1585, V-1085	Not provided
External output TRIGGER SIGNAL OUT	Output voltage:25mV/DIV approx. (Full scale on the CRT) 50-ohm termination Frequency response:DC to 10MHz Output impedance:50ohms approx.	←	Not provided	Same as V-1585, V-1085	Not provided
Calibration Waveform Voltage	1kHz ± 20%, square wave 0.5V ± 1%	←	←	←	←
Power supply	90V to 250V AC 48 to 440Hz 42W approx.	←	←	←	←
Others Dimensions	310(W) × 130(H) × 370(D)mm approx. (12.2(W) × 5.1(H) × 14.6(D)in. approx.)	275(W) × 130(H) × 360(D)mm approx. (10.8(W) × 5.1(H) × 14.2(D)in. approx.)	←	←	←
Weight	7kg approx. (15.4lb. approx.)	6kg approx. (13.2lb. approx.)	←	←	←
Ambient temperature	Operation:0 to 50°C(32 to 122°F)	←	←	←	←

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Ambient temperature	Safe operating: 10 to 35°C (50 to 95°F) Storage: -20 to 70°C (-4 to 158°F)	←	←	←	←
Humidity	Operating mode: 35 to 85% Non-operating mode: 45 to 85%	←	←	←	←
EMI	VDE 0871, Category B	←	←	←	←