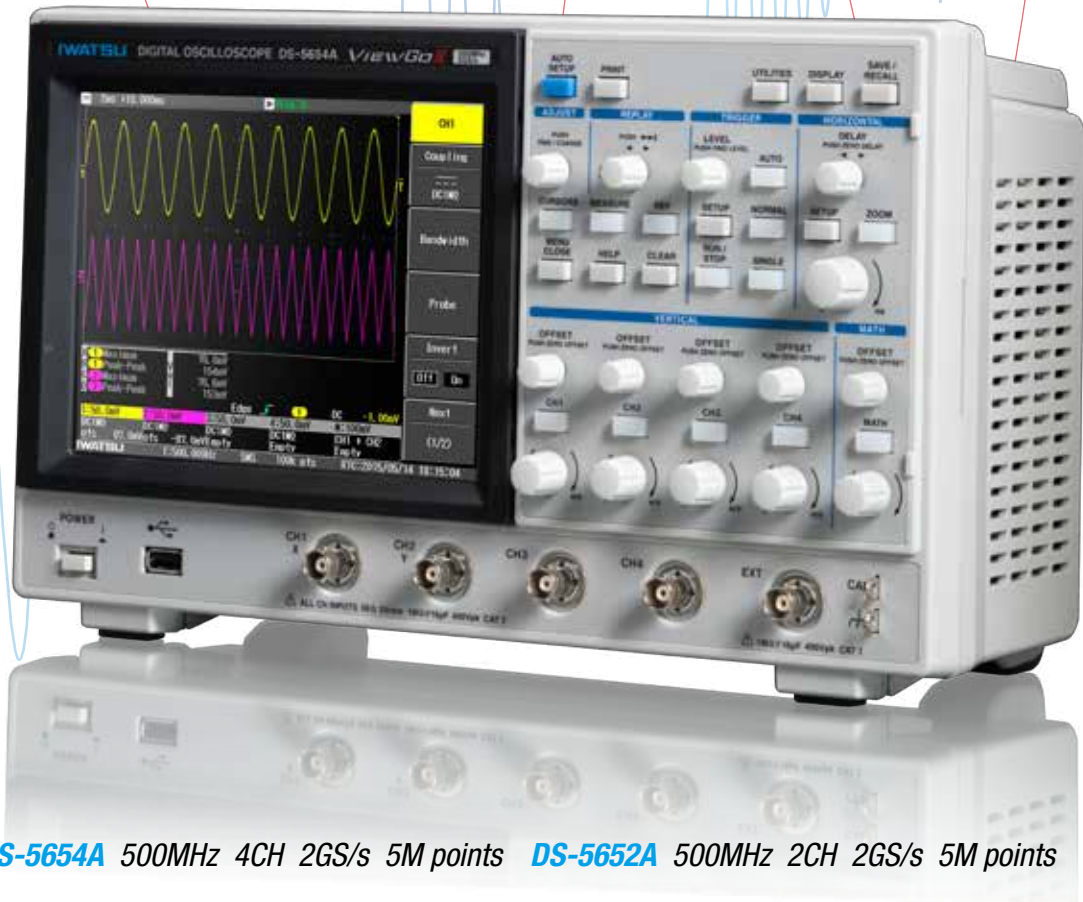


Precise waveforms IWATSU has cultivated for many years and newly added functions make the scopes more powerful

ViewGo II



- | | |
|--|--|
| DS-5654A 500MHz 4CH 2GS/s 5M points | DS-5652A 500MHz 2CH 2GS/s 5M points |
| DS-5634A 350MHz 4CH 2GS/s 5M points | DS-5632A 350MHz 2CH 2GS/s 5M points |
| DS-5624A 200MHz 4CH 2GS/s 5M points | DS-5622A 200MHz 2CH 2GS/s 5M points |
| DS-5614A 100MHz 4CH 2GS/s 5M points | DS-5612A 100MHz 2CH 2GS/s 5M points |

■ 200MHz/100MHz scopes equip 50 Ω inputs

This makes a wide variety of probes available.

■ AUX OUT terminal is built in as a standard feature

Besides a trigger signal output, this terminal can output Pass or Fail result.

■ Averaging counter

Averaging numbers are displayed during the process.

■ Display of High Resolution mode (Max.12bit)

Vertical resolution is displayed during high resolution processing.

■ Enable / Disable Auto-setup

If Disable AUTOSET is selected, it prevents unintentional change in Panel settings even when Auto-set up button is miss-operated.

Avg 65536

HR 12.0bit

DS-5600A Series Specifications

	DS-5654A	DS-5652A	DS-5634A	DS-5632A	DS-5624A	DS-5622A	DS-5614A	DS-5612A
Frequency bandwidth(-3dB)	500MHz		350MHz		200MHz		100MHz	
Rise time(Typical)	750ps		1ns		1.7ns		3.5ns	
Input channels	4	2	4	2	4	2	4	2
Maximum Sampling Rate, Equivalent Sampling Rate	2GS/s (When 2 channels interleaved) / 1GS/s (when all channels are in use) , 100GS/s							
Peak detect resolution	1ns							
Averaging	2 - 65536times (step by exponent of 2), Monitor display the averaging numbers							
Maximum Memory Length / Vertical Resolution	5M points (when 2 channels interleaved), 2.5M points (when all channels are in use) /8-bit (When high-resolution is valid: Maximum 12-bit)							
Input Voltage Range	2mV/div - 10V/div (1M Ω), 2mV/div - 2V/div (50 Ω)							
Offset Voltage	2mV/div - 50mV/div : $\pm 1V$, 50.2mV/div - 500mV/div : $\pm 10V$, 502mV/div - 10V/div : $\pm 100V$							
DC Gain Accuracy	$\pm (1.5\% + 0.5\% \text{ full scale})$							
Maximum Input Voltage	$\pm 400V_{\text{peak}} (1M\Omega)$, $5V_{\text{rms}} (50\Omega)$							
Band-Limiting Filter	Analog : 100MHz, 20MHz, 2MHz, 200kHz Digital : Select either LPF, HPF or SMA, independent for each channels				Analog : 20MHz, 2MHz, 200kHz Digital : Select either LPF, HPF or SMA, 4 independent channels			
Input Coupling / Input impedance	GND, DC 1M Ω , AC 1M Ω , DC 50 Ω /1M Ω $\pm 1\%$ // 16pF, 50 Ω $\pm 1\%$							
Probe Sense	Automatic Detection 1:1, 10:1, 100:1, 1000:1, Manual Settings 1:1, 5:1, 10:1, 20:1, 50:1, 100:1, 200:1,500:1,1000:1, 2000:1							
Time Axis Range	500ps/div - 50s/div		1ns/div - 50s/div		2ns/div - 50s/div		5ns/div - 50s/div	
Standard Probe	SS-101R(supplied as standard for all channels)				SS-0130R(supplied as standard for all channels)			
Roll Mode / Clock Accuracy	50ms/div - 50s/div (100kS/s max) / $\pm 10\text{ppm}$							
Clock Accuracy	$\pm 10\text{ppm}$							
Trigger Function	Edge, Edge ALT, Edge OR, Pulse Count, Pulse Width, Cycle, Dropout, TV, Pattern (OR, NOR, AND, NAND), Serial (UART, SPI, I ² C)							
TV Trigger / Line setting range selection / Field selection	NTSC, PAL, Custom / UP to 3,000 / 1, 2, 4 & 8							
Pulse Count Trigger Setting Range / Pulse Width Trigger Time Setting Range	1 - 9999 events / 15ns - 50s							
Cycle Trigger Setting Range / Dropout Trigger Time Setting Range	40ns - 50s / 50ns - 50s							
Pattern Trigger	OR, NOR, AND, NAND							
Trigger Source / State / Threshold level	All Channels / HIGH, LOW, Don't Care / All Channels independent Setting							
Serial Trigger								
UART	Trigger Selection / Bit rate	START, STOP, Parity Error, Data Pattern / 1000bps - 1 Mbps (set in units of 100bps/step)						
	Comparison data length / Signal	5 - 8bits / CH1 - CH4, EXT (CH1, CH2, EXT for 2-channel models)						
SPI	Trigger Selection/CS Selection	Data Pattern / Idling time specified when no positive logic/negative logic or CS						
<small>*CH1Input is specialized only for SCK Signal Input at Maximum 20MHz.</small>	Comparison Data length / Signal	4 - 64bits / CH1 - CH4, EXT (CH1, CH2, EXT for 2-channel models)						
I ² C	Trigger Selection / Address Mode	START, STOP, RESTART, NACK, Data Pattern / Selected from 7-bit/10-bit/EEPROM read						
	Comparison Data length / Signal	1 to 5bytes when the address is 7-bit/10-bit, 1byte when EEPROM read (with shift comparison) / CH1 to CH4, EXT (CH1, CH2, EXT for 2-channel models)						
Trigger Source	All channels, EXT ($\pm 0.5V$), EXT10 ($\pm 5.0V$), Line							
Trigger Slope / Coupling	+, - / AC, DC, High Frequency Rejection, Low Frequency Rejection, Noise Rejection							
Display / Resolution	7.5 -inch Color TFT LCD (touch screen) / VGA : 640x480 pixels							
Display Mode / Vector Connection / Analog Persistence	Y-T, XY, XY Trigger/Sample Point Interpolation Display, Dot Display/Monochrome Grayscale, Spectrum Display							
Persistence Display Time	100ms, 200ms, 500ms, 1s, 2s, 5s, 10s, infinite							
Internal Waveform Storage (REF Memory) /Front Panel Setting	5 Waveforms / Possible to save five settings in the internal memory. External USB memory supported							
AUTO SETUP function	Enable/Disable settings selectable							
Parameter Measurement, Cursor, Zoom, Calculation, Replay functions								
Parameter measurement	Maximum Value, Minimum Value, Peak-Peak, RMS, Cycle RMS, Average, Cycle Average, Top, Base, Top-Base, Rising Overshoot, Falling Overshoot, Rising Time 20-80%, Falling Time 80-20%, Rising Time 10-90%, Falling Time 90-10%, Frequency, Cycle, + Pulse Count, - Pulse Count, + Pulse Width, - Pulse Width, Duty Ratio, Integral, Skew (+, -), Skew @ level							
Simultaneous Measurement Count / Statistic Value	Maximum 4 Parameters / Maximum Value, Minimum Value, Measurement Count							
Logging items	Time, Parameter Measurement Results (Conditions A, B, C, D), Pass/Fail Judgment Results							
Output destinations	Recording Time: Pop-up menu, internal memory (maximum 86,400 records), After Recording: USB memory							
Pass/Fail Judgement	Judgment Mode: Parameter Judgment, Judgment Results: Saved on USB, Beep Tone, Pulse Output (DS-578 option required), Logging Page Search Function: Select Pass or Fail and search in ascent or descent							
Cursor / Zoom	Time, Amplitude, Time & Amplitude, Value at Cursor Position/ Press the Zoom button on the front panel to display an enlarged waveform on a new grid							
Calculation Function	Addition, Subtraction, Multiplication, Differential Calculus, Integral Calculus, FFT(maximum 8k points, rectangular, hanning, flat-top window functions), Double calculation of the results either addition, subtraction, or multiplication possible with either Differential Calculus, integral calculus or FFT (9 patterns)							
Rescale / Unit Conversion	$a * x + b$ (x: Input voltage, a, b: User defined) / volt, ampere, watt, °C, no display							
Replay	Automatic waveform logging, storage for a maximum of 1,024 waveforms, replay possible							
Frequency Counter	6 digits							
Interface	Supports USB 2.0HS (device, host), GPIB (factory-delivered option DS-576), Optional external connector							
AUX OUT	Switchable to a trigger signal output or Pass/Fail output (AUX IO2 : BNC connector)							
Optional Accessories								
DS-577 AUX IO CH1 / CH2 Output*(factory-delivered option)	AUX IO1: Output CH1 Input signal to which offset voltage added, AUX IO2: Output CH2 Input signal to which offset voltage added							
DS-578 AUX IO CH1 Output*(factory-delivered option)	AUX IO1: Output CH1 Input signal to which offset voltage added							
DS-576 GPIB Interface (factory-delivered option)	GPIB : IEEE488.2							
DS-579 Probe power source option	Power source for Iwatsu active probes (Two probe power connectors)							
Waveform Data Storage	Saved on the USB with binary, ASCII, calculation (ASCII)							
Hard copy Output	TIFF, BMP and PNG images saved on the USB or output to printers that support PictBridge®							
Calibration Signal Output	Square Waveform 1kHz, 3Vp-p							
Power Source / Power Consumption	AC100V - 240V (50Hz/60Hz) , AC100V - 120V (400Hz) / 95VA (60W) max							
Dimensions / Unit Weight	Approximately 330Wx190Hx124D mm / Approximately 3.7kg							
Guaranteed Performance Temperature	10°C - 35°C							
Operating Temperature / Humidity / Altitude	Temperature 0 to 40°C / Humidity 5% to 80% RH \leq 30°C (no condensation), RH 55% or less at 40°C (no condensation) / Altitude 2,000m or less							

*Distribution of DS-5600A series is limited in Japan and Asian markets. *The products shown in this catalogue are current models at the date of publication. Design and specifications are subject to change without notice for improvement.

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