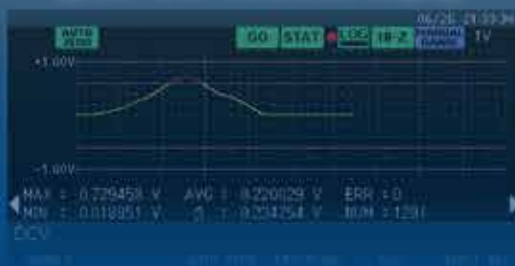


## Further Advanced IWATSU Digital



■ Real-time Trend chart Display



■ Real-time Histogram chart Display

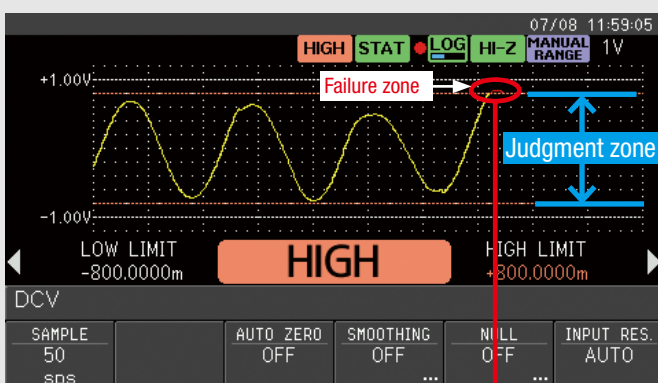


# Further Advanced 4 points

- *Widen Screen display*
- *Variation observable through Histogram chart*
- *Rotary knob for easy operation*
- *Variation observable through Trend chart*



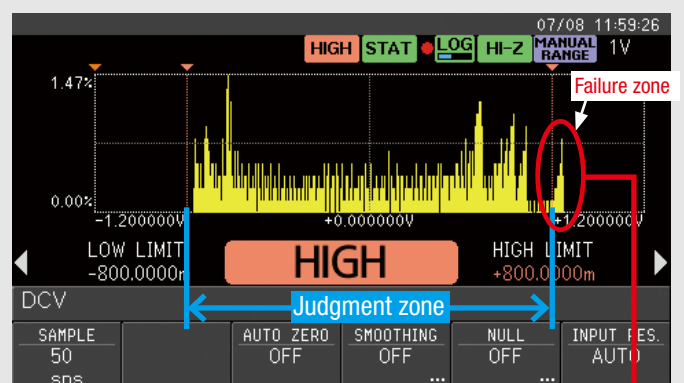
## Real-time Trend chart display + Pass/Failure function



Trend chart is displayed in red light in excess of Pass/Fail level as well as "HIGH" indication in red color.

You can observe the time when the failure happened with the real-time trend chart. This lets you compare the trends between the lots and find out why such defective lot is made.

## Real-Time Histogram chart display + Pass/Failure function



There are variations in the LOW/HIGH sides.

You can observe dispersed data by Histogram chart. The above shows the data in the failure zone for example.

## Best suited applications

- Monitoring of voltage fluctuation/abnormal conditions in power-supply line
- Operation test of sensors
- Endurance test of devices (Long-time voltage monitoring)
- Trend chart analysis of voltage changes at the time of instantaneous blackout
- Piezoelectric Energy harvesting

## VOAC7602 Main Features

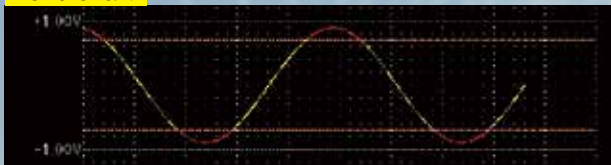
Display digit	6·1/2 digits	Numerical display	Yes
DC10V range accuracy	±(0.0035% of reading + 0.0005% of range)	Histogram display	Yes
Maximum sampling rate	7,500 times/sec.	Trend chart display	Yes
Measurement item	DC/AC voltage, DC/AC current	Analog meter display	Yes
	2/4 terminals resistance, Period, Continuity, Diode test, Temperature	Pass/Failure display	Yes
Temperature sensor	Thermocouple, RTD	Interface	Standard USB
Internal memory	100,000 data	Optional	LAN&RS232, DIO, GPIB
		Accessories	Test leads, CD-ROM Instruction manual

## Selectable Screen Display (Enable display with combination of measurement scene)

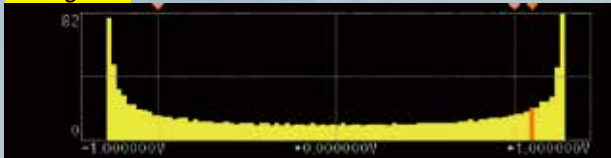
### Large display of numbers



### Trend chart



### Histogram



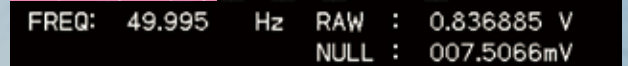
### Analog meter display



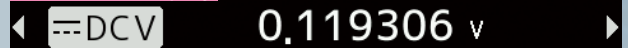
### Pass/Fail judgment display



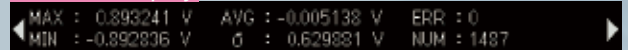
### Frequency display



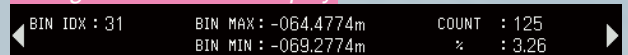
### Data value display



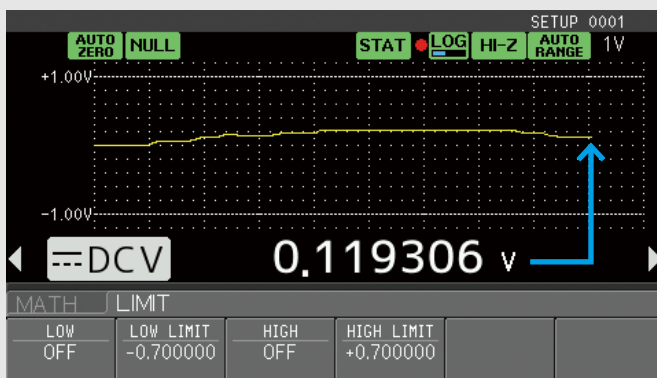
### Statistics display



### Histogram calculation display

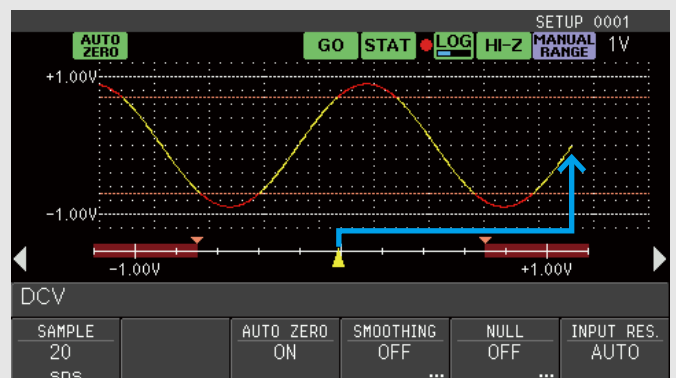


## Real-time Trend chart display + Data value display



Showing the latest data and Trend chart simultaneously

## Real-time Trend chart display + Analog meter display



Showing Trend chart and Analog meter simultaneously

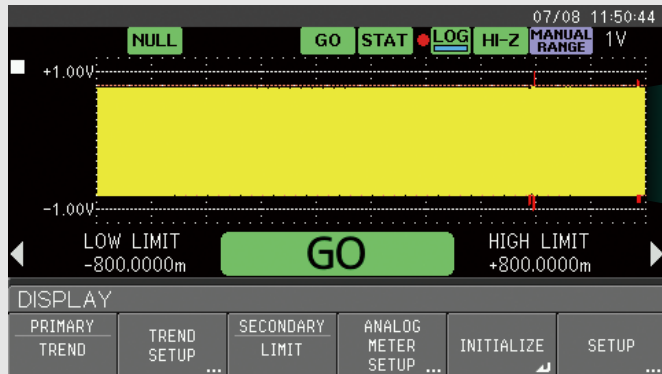
As the latest data is displayed as well as the trend chart showing overall trend, VOAV7602 is easy to use when you are adjusting the bias within the targeted value. Moreover, by combination with Analog meter, it is easy to find out visually the differences to the targeted value.

## Best suited applications

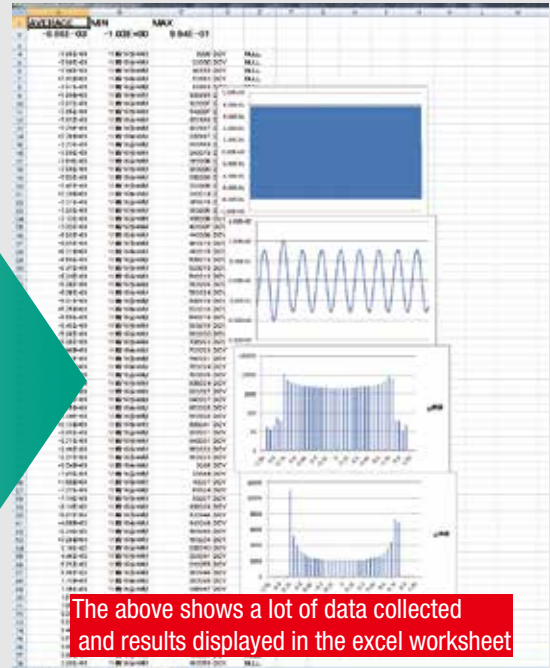
- Adjustment of Power Supply Voltage/Bias
- Adjustment of Piezoelectric device drivers
- Adjustment and inspection of piezoelectric transformers (Evaluation of low magnetic noise, etc.)

## Real-time Trend chart can be stored in an Excel file.

Functions and graph analysis features in an Excel file will let you do wider range of analysis. Utilities included in IWATSU INSTRUMENTS TOOLS are really helpful in analyzing a large amount of data.



The above shows the result of taking in the data continuously for a long time.



The above shows a lot of data collected and results displayed in the excel worksheet

### VOAC7602 and accessories

VOAC7602 - 6·1/2 Digital Multimeter SC-362 - DIO Interface Option

SC-361 - LAN&RS-232 Interface Option SC-363 - GPIB Interface Option

### Specifications and Functions

Basic specifications							
Display	4.3 inch color LCD						
<table border="1"> <thead> <tr> <th>Display digit</th> <th>Measurement speed</th> </tr> </thead> <tbody> <tr> <td>6 · 1/2 digits Full scale 1199999</td> <td>50 times /sec. (60 times /sec. Power Freq. at 60Hz)</td> </tr> <tr> <td>5 · 1/2 digits Full scale 119999</td> <td>7.5k times/sec.</td> </tr> </tbody> </table>		Display digit	Measurement speed	6 · 1/2 digits Full scale 1199999	50 times /sec. (60 times /sec. Power Freq. at 60Hz)	5 · 1/2 digits Full scale 119999	7.5k times/sec.
Display digit	Measurement speed						
6 · 1/2 digits Full scale 1199999	50 times /sec. (60 times /sec. Power Freq. at 60Hz)						
5 · 1/2 digits Full scale 119999	7.5k times/sec.						
Measurements							
DC Voltage	Range	100mV-1000V					
	Input impedance	Over 1GΩ or 10MΩ					
	Input bias	<30pA					
AC Voltage	Range	100mV-750V					
	Bandwidth	20Hz-300kHz					
	Crest Factor	5 or less					
	Input impedance	1MΩ//100pF					
	AC filter	20Hz, 200Hz					
Resistance (2WΩ/4WΩ)	Range	100Ω-100MΩ					
DC current	Range	1mA-3A					
AC current	Range	1A-3A					
	Bandwidth	20Hz - 5kHz					
Continuity measurement (CONT)		Yes					
Diode (DIODE)		Yes					
Frequency (FREQ)		3Hz - 300kHz					
Temperature (TEMP)		Thermocouple (TYPE- R, K, T, J, E) Cold junction temperature manually, RTD(2-wire or 4-wire)					
Interfaces							
Standard		USB2.0					
Optional		LAN&RS-232 (SC-361) / DIO (SC-362) / GPIB (SC-363)					
Functions							
Difference operation (NULL)		Yes					
Moving average operation		2 ~ 100 times					
Statistical calculation (MAX/MIN/AVG/SDT)		Yes					
Limit judgment							

Functions		
Scaling operation	Yes	
Decibel operation		
Measurement data memory(logging)	100k words	
Pre-triggering / level triggering	To be supported by Firmware updates	
Panel setup memory	Internal 10 + USB Storage memory	
Panel setup sequence	Internal memory (Optional RS-232 is required)	
Analog meter display		
Panel lock function	Yes	
Interval measurement		
Trend chart display	Real-time	Yes
	Off line	To be supported by Firmware updates
	Cursor & Search	To be supported by Firmware updates
Histogram display	Real-time	Yes
	Off line	To be supported by Firmware updates
	Cursor	To be supported by Firmware updates
USB host	Panel setup, measurement data and hard copy can be stored in USB memory	
Dimension / Weight		
Dimension (mm)	Approx. 225W × 100H × 366D (Excluding the protrusion part) Approx. 213W × 88H × 356D (Excluding the protector part)	
Weight	Approx. 3kg	
Protector	Yes	
Others		
Operating temperature and humidity range	0°C-50°C (less than 80%RH). However, there is to be no condensation, and in the 40-50°C range, 70% or less RH.	
Storage temperature and humidity range	-20°C-0°C, 40°C-60°C, (less than 70%RH). However, there is to be no condensation. 0°C-40°C, (less than 80%RH). However, there is to be no condensation.	
Power supply and Power consumption	AC100V, 110V, 220V, 240V±10% 50/60Hz (Other than AC100V is a factory option.), Frequency:50/60Hz, 20 VA (includes options) or less	
Accessories	Test leads, Fuse, CD-ROM Operation manual, Power cord	

**IWATSU** <http://www.iti.iwatsu.co.jp/>  
**IWATSU TEST INSTRUMENTS CORP.**

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