Measurably better value

High Accuracy & Resolution: 0.02%, 1uV, 1mΩ, 10nA, 0.01Hz, 100pF

Resettable current trip circuit

Bar Chart, Histogram and Statistics advanced displays

9 Measurement modes, including Frequency and Capacitance

TOUCH CONTROL

TEST BRIDGE

USB UNIVERSAL SERIAL BUS

ADM1055

5½ Digit Multimeter

aimtti.com

A SERIES
ADM1055

The ADM1055 multimeters are the latest release from Aim-TTi's new A Series line, developed to meet the requirements of design, test and education customers. The ADM1055 provides high accuracy measurements with advanced results displays.

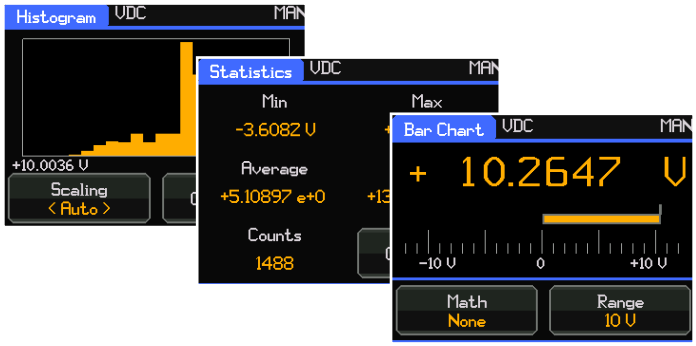
HIGH ACCURACY, HIGH RESOLUTION

The ADM1055 offers high-precision measurement with 5½ digit resolution and 0.02% basic DC accuracy. It supports ultra-fine measurements with sensitivities down to 1µV, 1mΩ, 10nA, 0.01Hz, and 100pF.

INTUITIVE DESIGN

Featuring a simple touch operated GUI with customisable display options, the ADM1055 is quick and intuitive to setup.

It is ideal for busy lab environments, with measurement modes easily accessed via dedicated front-panel keys and illuminated input terminals that light up according to the selected function. Together, these features simplify operation, guide users to the correct connections, and help prevent errors.



In addition to the standard numeric display, the ADM1055 also includes bar chart, histogram, and statistical analysis modes. Helping users to visualise trends, and monitor signal stability in real time.

ADVANCED MATH FUNCTIONS

A comprehensive range of math functions are offered, designed to simplify analysis and accelerate test workflows. Users can apply Null and Ω Null features to subtract baseline readings or test-lead resistance, while Hold and Touch & Hold freeze stable measurements for easy review.

For deeper analysis, the ADM provides % Deviation, Ax+b linear scaling, Limits testing with PASS/HI/LO indicators, dB measurement relative to a chosen impedance, and Power calculations using V^2/R. Its built-in statistical tools allow quick interpretation of measurement trends and variability.

- 5½ Digit High Performance Bench Multimeter
- High accuracy and resolution: 0.02%, 1uV, 1mΩ, 10nA, 0.01Hz, 100pF
- Resettable current trip circuit
- Intuitive touch screen operation
- Bar Chart, Histogram and Statistics advanced displays
- Terminal illumination for guided use
- 9 Measurement modes, including Frequency and Capacitance
- Advanced math functions
- Compact footprint , aluminium case (213 x 228 x 98 mm (WxDxH))
- Kensington lock
- USB remote interface, SCPI compatible
- Free Test Bridge control software

TOUCH CONTROL

USB UNIVERSAL SERIAL BUS

TEST BRIDGE

RESETTABLE CURRENT TRIP

An integrated resettable current trip protects both the instrument and the DUT up to 48V, without requiring fuse replacement.

TRIGGER-BASED DATA CAPTURE

The trigger system enables batch measurement and analysis. Users can define the number of readings required, then trigger to start. The meter resets statistics, records the set count, then holds the result for review.

REMOTE CONNECTIVITY

The A Series comes equipt with SCPI compliant commands and plug and play USB connectivity. Full access to the Aim-TTi Test Bridge software is provided free with no additional hidden costs.

Aim-TTi's Test Bridge PC software is available as free download from the Aim-TTi website, which can be used to control up to 4 instruments simultaneously.

www.aimtti.com/support

ADM1055 Rear

COMPACT FOOTPRINT

The A series is designed with your workspace in mind. The compact footprint (213 x 228 x 98 mm (WxDxH)) ensures they won't take up unnecessary space on your bench or shelf.

CUSTOMISABLE COLOUR DISPLAY

With 6 different colour themes, the A Series can be set to simulate different channels with a visual cue or group together specific instruments, and for different working environments, light and dark themes are provided.

PREMIUM ALUMINIUM CASE

The premium aluminium case not only provides robust protection but also adds a touch of sophistication, elevating your testing capabilities with equipment that combines functionality, durability, and style.

ADM1055 Group

TECHNICAL SPECIFICATION

MEASUREMENT PARAMETERS AND ACCURACY

Accuracies apply for 1 year 19°C to 25°C after 30 minutes warm-up.
Temperature coefficient outside these limits is <0.1 x quoted range accuracy per °C.
General specifications apply for the temperature range 5°C to 40°C.
Typical specifications are determined by design and are not guaranteed.
The scale length is 120,000 counts (unless otherwise stated) giving a maximum measured value for each range of 119,999. Thus, for the 100V range the maximum measured value is 119.999 volts Accuracies are quoted in terms of a percentage of the measured value plus a number of least significant digits.
Reading Rate: 4 readings per second.

DC VOLTAGE

Range	Accuracy ± (% of reading + counts)	Resolution
100.000mV	0.02% + 5*	1uV
1000.00mV	0.02% + 3	10uV
10.0000V	0.025% + 3	100uV
100.000V	0.025% + 3	1mV
600.00V	0.04% + 6	10mV

*after null

Typical Input Impedance	10MΩ//<1000pF
Maximum Input	600V DC or AC peak, any range.
CMR	1kΩ unbalanced CMR is >90dB at DC/50Hz/60Hz.

AC VOLTAGE TRUE RMS

Range	Accuracy ± (% of reading + counts)			Resolution
	45Hz – 10kHz	10kHz – 30kHz	30kHz – 50kHz	
100.000mV	0.2% + 200	1.5% + 300	-	1uV
1000.00mV	0.2% + 100	0.5% + 100	2% + 250	10uV
10.0000V	0.2% + 100	0.5% + 100	2% + 250	100uV
100.000V	0.2% + 100	0.5% + 100	2% + 250	1mV
430.00V	0.2% + 100	0.5% + 100	2% + 250	10mV

Accuracy specifications apply for readings between 10,000 and 120,000 counts. Maximum crest factor = 3 at nominal range maximum.

Input Impedance	1MΩ//<1000pF
Maximum Input	430V rms, 600V peak; any range.
CMR	1kΩ Unbalanced CMR is >70dB at DC/50Hz/60Hz

RESISTANCE

Range	Accuracy ± (% of reading + counts)	Resolution
100.000Ω	0.075% + 8	1mΩ
1000.00Ω	0.075% + 3	10mΩ
10.0000kΩ	0.075% + 3	100mΩ
100.000kΩ	0.075% + 3	1Ω
1000.00kΩ	0.5% + 5	10Ω
10.0000MΩ	0.5% + 5	100Ω

Maximum Input	600V DC or AC rms, any range.
Max. O/C Voltage	3.5V

DC CURRENT

Range	Accuracy ± (% of reading + counts)	Resolution
1.00000mA	0.05% + 5	10nA
10.0000mA	0.05% + 5	100nA
100.000mA	0.05% + 5	1µA
1000.00mA	0.2% + 5	10µA
10.0000A(<5A)	0.2% + 5	100µA
10.0000A(>5A)	0.5% + 10	100µA

Maximum Input	mA ranges- 1.6A DC or AC rms, 48V resettable trip circuit, 600V fuse protected.
	10A range- 10A DC or AC rms, 600V, fuse protected.
Voltage Burden	1mA range ≤125mV;
	10mA range ≤140mV;
	100mA range ≤180mV;
	1A range ≤800mV;
	10A ranges ≤600mV;

AC CURRENT TRUE RMS (45Hz – 10kHz)

Range	Accuracy ± (% of reading + counts)	Resolution
1.00000mA	0.35% + 20	10nA
10.0000mA	0.35% + 20	100nA
100.000mA	0.35% + 20	1µA
1000.00mA	0.5% + 20	10µA
10.0000A(<5A)	0.5% + 20	100µA
10.0000A(>5A)	1.0% + 20	100µA

Accuracy specifications apply for readings between 10,000 and 120,000 counts. Maximum crest factor = 3 is typically 0.5%

Maximum Input	mA ranges- 1.6A DC or AC rms, 48V resettable trip circuit, 600V fuse protected.
	10A range- 10A DC or AC rms, 600V, fuse protected.
Voltage Burden	1mA range ≤125mV;
	10mA range ≤140mV;
	100mA range ≤180mV;
	1A range ≤800mV;
	10A ranges ≤600mV;

FREQUENCY

Range	Accuracy ± (% of reading + counts)	Resolution
100.00Hz	0.01% + 1	10mHz
1000.0Hz	0.01% + 1	100mHz
10.000kHz	0.01% + 1	1Hz
100.00kHz	0.01% + 1	10Hz

Scale Length	12,000 counts
Frequency Range	10Hz to >100kHz
Input sensitivity	Better than 30mVrms (100mV range); better than 10% of range for all other Vac and Iac ranges.

CAPACITANCE

Range	Accuracy ± (% of reading + counts)	Resolution
100.0nF	2% + 5	100pF
1.000µF	2% + 5	1nF
10.00µF	2% + 5	10nF
100.0µF	2% + 5	100nF

Scale Length	1200 counts

CONTINUITY AND DIODE TEST

Continuity	100Ω range selected; audible tone sounds for impedance <10Ω.
Diode Test	Test current approximately 1mA; displays voltages up to 1.2V.
Max. O/C Voltage	3.5V
Maximum Input:	600V DC or AC rms, any range.

COMPUTING FUNCTIONS & STATISTICS

Null (relative)	Stores current reading and subtracts it from future readings.
Ω Null	Additional non-volatile function for nulling test lead resistance.
Hold	Reading is frozen.
T Hold	(Touch & Hold) Reading is frozen when stable.
% Deviation	Displays % deviation from entered reference value.
Ax+b	Linear scaling of results, with offset.
Limits	Reading displayed with HI, LO, or PASS with respect to user-defined high and low limits.
dB	Displays measurement in dBm relative to 600Ω or other user-entered impedance.
Power	Calculates V2/R and displays in Watts with respect to a user-defined impedance.
Min/Max	Minimum and maximum reading stored.
Average	Mean of readings.
Span	Span of readings (between minimum and maximum).
Counts	Number of readings included within statistical analysis.

INTERFACES

USB	Full digital remote control facilities are available through the USB interface. Standard USB 2.0 hardware connection. Implemented as virtual-COM port. SCPI compatible
Remote Command Processing Time	Typically < 100ms

GENERAL

Terminals	4mm Banana sockets on 19mm spacing.
Display	2.8” IPS TFT (320x240) Backlit, 4W resistive touch.
Data Entry	Resistive touch screen user interface navigation, hard key measurement function selection, value entry by directional keys or by rotary control.
Stored Settings	Up to 6 complete instrument set-ups may be stored in non-volatile memory.
Size and Weight	213.3 x 227.6 x 98.2 mm (WxDxH) 1.3kg
Power	110-240VAC ±10% 50/60Hz; 30VA max. Installation Category II.
Operating Range	+5°C to 40°C, 20-80% RH.
Storage Range	-20°C to + 60°C.
Cooling	Natural convection, no fan.
Environmental	Indoor use at altitudes up to 2000m, Pollution Degree 2.
Safety & EMC	Complies with EN61010-1, EN61010-2-030, EN61010-2-033 & EN61326-1. Measurement Category II to 300V. All inputs 600Vpk max to ground.
Security	Kensington Lock

Thurlby Thandar Instruments Ltd. operates a policy of continuous development and reserves the right to alter specifications without prior notice.

BENCH TOP INSTRUMENTS

POWER SUPPLY

FX Series
DC Power supply

- Dual or triple output.
- Digital control.
- Tracking.
- Multi on/off.

NEW SERIES · 42V VOLTAGE · SELV · 6A CURRENT · TOUCH CONTROL · 246W POWER · TEST BRIDGE · OUTPUT <2mV NOISE

WAVEFORM GENERATOR

ATG1005
Function Generator

- Single output.
- Dedicated sync output.
- Linear/logarithmic sweep with single or dual slope.
- FSK and PSK modulation.

NEW MODEL · 1mHz TO 5MHz · TOUCH CONTROL · TEST BRIDGE · TEST BRIDGE WFM

PRECISION MEASUREMENT

ADM1055
Digital multimeter

- Ax+B, limits, % deviation and power.
- 0.02% basic accuracy.
- Analogue style bar chart, histogram and statistics.

NEW MODEL · 600V DC · 10A CURRENT · TOUCH CONTROL · 5½ DIGIT · TEST BRIDGE · 2 WIRE

PRECISION MEASUREMENT

ALD1120
Electronic Load

- Variable slew rate.
- High and low pulse.
- Linear/logarithmic sweeps
- Battery discharge and capacity measurements.

COMING SOON · HIGHER 120V VOLTAGE · HIGHER 24A CURRENT · TOUCH CONTROL · 120W POWER · TEST BRIDGE · CC CR CV CP

EXCELLENCE THROUGH EXPERIENCE

Aim-TTi is the trading name of Thurlby Thandar Instruments Ltd. (TTi), one of Europe's leading manufacturers of test and measurement instruments.

The company has wide experience in the design and manufacture of advanced test instruments and power supplies built up over more than thirty years.

The company is based in the United Kingdom, and all products are built at the main facility in Huntingdon, close to the famous university city of Cambridge.

TRACEABLE QUALITY SYSTEMS

TTi is an ISO9001 registered company operating fully traceable quality systems for all processes from design through to final calibration.

bsi. ISO 9001 Quality Management

ISO9001:2015

Certificate number FM 20695

WHERE TO BUY AIM-TTI PRODUCTS

Aim-TTi products are widely available from a network of distributors and agents in more than sixty countries across the world.

To find your local distributor, please visit our website which provides full contact details.

www.aimtti.com

DESIGNED IN THE UK · MANUFACTURED IN THE UK ·

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