



# Advance Technical Systems

## SHORT FORM CATALOGUE



### 6640T AMS THERMOMETRY BRIDGES

#### Advanced Measurement Series of Temperature Bridges

- Resistance Range : 0.1  $\Omega$  to 100 k $\Omega$
- Best Accuracy:  $\pm$  0.020 ppm with 1 mA of current
- Measurement Rates as Fast as 2 Seconds
- Built-in Windows 10 computer and Touch Screen Display providing complete measurement results and Graphs



### 7520 PRECISION DC VOLTAGE DIVIDER

- Sub ppm ratio Uncertainties
- Automated Self-Alignment (i.e. Self Calibration)
- No External Standards required for Self-Alignment
- Built in voltage reference and Null Detector
- Wider voltages range from 1:1 to 1000:1 & Reverse
- Input voltage range from 1 to 1100 volts
- Color Screen Touch Menu Operation

### 7810 TRANSCONDUCTANCE AMPLIFIER

- 100A Model
- Calibrated frequency DC to 100 kHz
- Uncalibrated 100 kHz to 2 MHz
- High 9V Voltage Compliance
- Unique Touch screen Interface
- Embedded Windows Computer
- Excellent Short Term Stability



### 7220 SERIES 3 PHASE POWER ANALYZER

- Input Current Ranges 5A and 125A
- 3-Phase Plus Neutral Measurements
- Power  $\leq$  50 ppm for 3/10 Second Aggregation!
- Able to Measure Any Signal Including Non-Sinusoidal and Quasi-Stationary



### 7330 SERIES TRUE AC/DC OIL RESISTANCE STANDARDS & 7334 SERIES TRUE AC/DC AIR RESISTANCE STANDARDS

- Typical AC/DC Error  $<$  1.0 ppm at 1kHz
- Stability  $<$  2 ppm/year
- Temperature coefficient  $<$  0.2 ppm/ $^{\circ}$ C
- Resistance range from 1 $\Omega$  to 10k $\Omega$
- Normal Accuracy  $<$  2 ppm
- ISO/IEC 17025 DC Calibration Included



### DECADE STANDARDS

#### 9340 SERIES PRECISION DECADE RESISTANCE STANDARDS

- 2-terminal and 4-terminal models
- Widest resistance range available from 1  $\mu\Omega$  to 10 T $\Omega$
- Ideal for use as a precision RTD simulator or working standard
- Best accuracy 0.01% with low zero resistance, excellent stability 10 ppm/year
- Very low temperature coefficients as low as 5 ppm/ $^{\circ}$ C
- 3 to 7 dial styles, 55 standard models



### 9334A SERIES PRECISION AIR RESISTANCE STANDARDS

- Widest range available from 1  $\mu\Omega$  to 100 G $\Omega$  and custom values
- Ultra stable,  $<$  2.5 ppm/year
- Ultra low temperature coefficient  $<$  0.2 ppm/ $^{\circ}$ C
- 1 G $\Omega$  and 10 G $\Omega$  direct plug-in models to Wavetek 1271/1281, HP/Agilent 3458A and Fluke 8508A DMMs
- Nominal Initial Accuracy  $<$  2 ppm



### 6634A SERIES TEMPERATURE STABILIZED RESISTANCE STANDARDS

- Up to 10 elements, range 0.1  $\Omega$  to 100 M $\Omega$
- Outstanding stability,  $<$  2 ppm/year
- Ultra low temperature coefficients(t/c),  $\pm$  0.005 ppm/ $^{\circ}$ C
- Internal PRT sensor for temperature monitoring
- Internal PRT stability:  $\pm$  0.05 $^{\circ}$ C/Year
- Thermometry Resistance value available

### 6622A SERIES DCC RESISTANCE BRIDGES

- Resistance Range available: 1 m $\Omega$  to 1 G $\Omega$
- Accuracy available 0.1 to 0.015 ppm
- Temperature measurement Available
- Internal Voltages up to 1000V DC
- Wide Range of Ratios: 0.1:1 ~ 100:1
- Resolution:  $\pm 0.0001$  ppm of Full Scale



### 6622A-T TEMPERATURE BRIDGE

- Wide Range From 0.1  $\Omega$  ~ 100 k $\Omega$ , Supporting a Wide Variety of SPRT's, PRT's, and RTD's
- Accuracy available 0.025 mK to 0.013 mK
- Built in Temperature Conversion for ITS-90 and IPTS-68
- Wide Range of Ratios: 0.1:1 ~ 100:1
- Resolution:  $\pm 0.1$  ppb of Full Scale



### 6623A SERIES DCC RANGE EXTENDERS/CURRENT SOURCE Extend bridge measurement range to sub $\mu\Omega$ level

- Available in 150 A Increments to 10,000 A
- Output Current Stability Typically < 10 ppm for 1000 A and Higher
- Measures Resistances Down to 0.1  $\mu\Omega$
- Extender and Precision DC Source
- Automatic Control from 6622A Series Bridge
- Ideal for Calibrating DC Power Supplies & DC Shunts



### 6625 RESISTANCE AND CURRENT MEASUREMENT SYSTEM

- Range from 1  $\mu\Omega$  ~ 1 G $\Omega$  with Internal Voltages to 1 kVdc
- Wide Range of Ratios: 0.1:1 ~ 100:1, and Up to 2,000,000:1
- Accuracy available 0.1 to 0.02 ppm
- Customizable configuration including working standards, scanners, a DCC Bridge and range extenders 3A to 10,000 A
- Suitable for calibrating Resistance standards, DC Shunts, calibrators, DMMs, Decade Boxes and many more



### 6636 SERIES TEMPERATURE STABILIZED RESISTANCE STANDARDS

- Resistance Range available: 10 M $\Omega$  to 100 T $\Omega$
- Temperature Coefficient as low as  $\pm 0.2$  ppm/ $^{\circ}\text{C}$
- Stabilities as low as < 6 ppm/year
- Internal PRT Stability:  $\pm 0.02$   $^{\circ}\text{C}$ /Year



### 9336/9337 SERIES HIGH VALUE RESISTANCE STANDARDS

- Resistance Range available: 10 M $\Omega$  to 10 P $\Omega$
- Rated to 1000V with TC as low as 5 ppm/ $^{\circ}\text{C}$
- Stabilities as low as 10 ppm/year
- Nominal Initial Accuracy < 2 ppm



### 6530 PROGRAMMABLE DIGITAL TERAOHMMETER

- Resistance Range 100 k $\Omega$  to Over 10 P $\Omega$
- Accuracy as low as 8 ppm and < 20 ppm up to 200 G $\Omega$
- Test Voltages 1 to 1000 Volt
- Optional DC Current Measurement Range 10  $\mu\text{A}$  to 100 fA
- Optional Surface and Volume Resistivity Measurements
- Four different models with different range and uncertainty



### 6540 DUAL MEASUREMENT HIGH RESISTANCE BRIDGE

- Bridge and Direct Measurement Modes of Operation
- Resistance Range 100 k $\Omega$  to 20 P $\Omega$
- "True Ratio" Provides Multi-Ratios from 1:1 up to 100:1
- Optional Current Measurement from 20  $\mu\text{A}$  to 2 pA
- Optional Surface and Volume Resistivity Measurements
- Test Voltages 1 to 1000 V

### 5031/5032 VARIABLE TEMPERATURE AIR BATH

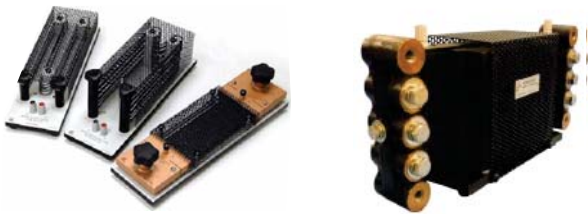
- Excellent Temperature Stability, Better Than 0.015  $^{\circ}\text{C}$  over 24 Hours
- Includes Separate PRT to Report the True Temperature Inside Bath
- Temperature Range 15  $^{\circ}\text{C}$  to 50  $^{\circ}\text{C}$
- Cooling Capacity up to 6  $^{\circ}\text{C}$  Below Ambient
- Large Volume Enclosure – Over 82 Liters!
- Enclosure is Fully EMI Shielded!
- Perfect for Checking Temperature Coefficients of Precision Air Resistors



### 5600 SERIES VARIABLE TEMPERATURE FLUID BATHS

- Available Sizes-50L, 75L, 100L & 300L
- Temperature Stability:  $\pm 0.001\text{K}$  with Water and  $\pm 0.0015\text{K}$  with Oil
- Range: -5  $^{\circ}\text{C}$  to 55  $^{\circ}\text{C}$
- Full automation Via Windows 10 Tablet (USB, IEEE)
- Designed for use with Oil, Water, Salt Water, Alcohol, Glycol and other Fluid
- 2nd probe included to report actual temperature anywhere in the bath





### 9230A SERIES PRECISION DC CURRENT SHUNTS

- Series Ranges from 10 A to 3,000 A
- Accuracy as low as 100 ppm
- < 10 ppm Long Term Stability
- 3 Point Current Calibration Provided
- Air or Oil Cooled Applications
- Available Forced Convection Option Improves Power Dissipation
- Extremely Low Self-Heating Effects



### PRECISION 7340/7350 SERIES AC/DC SHUNTS

- AC/DC Difference Zero at Power Frequencies, & < 10 ppm to 10 kHz
- Widest Available Bandwidth DC to 100 kHz
- Low Temperature Coefficients 2.5 ppm/°C
- 7340 Series Provides 12 Current Values from 1 mA to 100 A with Output Voltages from 0.2 to 1.0 V
- 7350 Series Provides 6 Ohmic Values with Currents 0.1 A to 25 A and Power up to 10 Watts



### AUTOSAL LABORATORY SALINOMETER MODEL 8400B

- Accuracy <0.002 Salinity
- Range 2 to 42 in Salinity
- Improved temperature stability
- No temperature compensation required
- Small samples & rapid measurements
- Data logging standard
- Improved maintainability



### PORTASAL SALINOMETER MODEL 8410A

- Accuracy <0.003 Salinity
- Completely Portable with Laboratory Accuracy
- Small 100 ml Samples and Rapid Measurements
- Direct Calculation of Salinity
- Easy to Set Up and Operate
- Microprocessor Controlled with RS-232 and IEEE



### SRX/SRC SERIES ECONOMICAL & SRL PRECISION RESISTANCE STANDARD

- Wide range of values- 1mΩ to 10 TΩ
- Stability 10 ppm/Yr and 2 ppm/Yr for SRL Series
- TC as low as 1 ppm /°C & 0.4 ppm /°C for SRL Series
- ISO-17025 Accredited Calibration included



### PRS-330/PRS-370 PRECISION PROGRAMMABLE RESISTANCE DECADE

- Resistance Range: 0.1 Ω to 20 MΩ
- Self Calibrating Programmable Source
- Precision lab grade accuracy 70 ppm + 1 mΩ
- Resolution: 1 μΩ



### HARS SERIES RESISTANCE DECADE BOX

- Resistance from 1 mΩ to 111 MΩ
- Available in double-power version: HARS-X2
- Wide choice: single through 11 decade units
- High accuracy : 0.01% (100 ppm) or 0.1% depending on model



### RTD SERIES - PRECISION RTD SIMULATOR

- Resistance Range Available- 1mΩ to 10 kΩ
- Accuracy for Z Series: 0.005% (0.012 °C for PT 100)
- Resolution: 1 mΩ (0.0025 °C for PT 100)
- Stability 0.0002% for 24 hours; 0.001% for 12 months



**HARS-LX SERIES  
DECADE RESISTANCE SUBSTITUTER LAB STANDARD**

- High accuracy - as good as 20 ppm
- High stability - as good as 5 ppm/yr
- Resistance from 1 mΩ to 121.1 MΩ
- Resolution 1 mΩ with a fixed decade or 20 μΩ with a rheostat



**GENRAD 1404 SERIES PRIMARY STANDARD CAPACITORS**

- Available in 10 pF, 100 pF, 1000 pF, 5000 pF, 10,000 pF
- 20 ppm/year stability
- Maximum Voltage 750V peak
- ISO-17025 accredited calibration Included



**HRRS SERIES HIGH RESISTANCE DECADE BOX**

- Resistance from 100 Ω to 100 GΩ
- High-accuracy: up to .01%, 3 Accuracy Classes Available
- Voltage up to 2000 V
- Excellent TC: as low as 5 ppm/°C



**GENRAD 1409 SERIES STANDARD CAPACITOR**

- Values 0.001 μF (1 nF) to 1000 μF
- Stability as good as ±0.01 %/year
- Two-to-five terminal configuration, depending on model
- Calibration accredited to ISO-17025 included



**HRRS-5 KV & 10 KV SERIES - HIGH RESISTANCE DECADE BOX**

- Resistance from 10 Ω to 11 TΩ
- High-accuracy: up to .01%; 3 Accuracy Classes
- Max voltage of 5 kV or 10 kV; 2 Series
- Ideal for the calibration of meggers



**GENRAD 1422 SERIES VARIABLE AIR CAPACITORS**

- Range as low as 0.0002 pF and as high as 1150 pF
- Stability: better than 0.02% full scale per year
- Maximum Voltage 1000V peak
- Settable to 40 ppm



**HACS-Z SERIES HIGH ACCURACY DECADE CAPACITANCE BOX**

- Range from 1 pF to 11,111 μF
- High accuracy of 0.05% + 0.5 pF
- Units available with as few as 3 and as many as 11 decades
- Excellent Stability 100 ppm per year
- 3-Terminal shielded construction



**GENRAD 1491 D, G PRECISION DECADE INDUCTOR**

- Most accurate decade inductor with accuracy's as good as 0.8%
- Inductance range from 1 mH or 100 μH to 11 H
- Maximum Voltage 500 vrms
- Sealed against moisture for long-term stability

**GENRAD 1482 SERIES INDUCTANCE STANDARD**

- Stable within ±0.01% per year
- 18 Models values from 1 μH to 10 H
- Low, known temperature coefficient
- Calibration accredited to ISO-17025 included
- Toroidal - free from external fields



**LOM-510A MICRO-OHMMETER**

- 1 μΩ resolution, 4½ digits
- Range: 1 μΩ - 200 Ω
- 0.02% basic accuracy
- 4-Wire Design to eliminate lead resistance



**Model 7660 PRECISION LCR METER**

- Accuracy 0.05% & display 7.0" TFT, 800x480 color screen
- Frequency range: 10 Hz to 2 MHz
- Measures 14 impedance parameters (2 simultaneously)



**MODEL 1888 MEGOHMMETER/HIGH RESISTANCE METER**

- Measurements from 1 kΩ to 100 TΩ
- 0.30% measurement accuracy with touch screen display
- Programmable test voltage from 1 to 1000 Vdc



### 1693 RLC DIGIBRIDGE / HIGH-ACCURACY IMPEDANCE BRIDGE

- 0.02% measurement accuracy for R,L,C,G,Z & Y
- Programmable frequency 12 Hz – 200 kHz with 0.01% accuracy
- 11 Impedance parameters
- A full, five-digit LED display for RLC; four-digit readout for D and Q



### MODEL 1910/1920 PRECISION LCR METERS

- 20 measurement parameters
- Frequency range: 20 Hz to 1 MHz
- Basic measurement accuracy: 0.1%
- Measurement speeds up to 40/sec



### 373 DEW POINT HYGROMETER

- High precision laboratory reference
- Measuring Range: -95°C to 95°C
- Accuracy:  $\pm 0.1^\circ\text{C}$  Dew/Frost Point
- Reproducibility:  $\pm 0.05^\circ\text{C}$  Dew/Frost Point
- Display: Active Matrix Color LCD
- Dual Mirror PRT's



### 473 DEW POINT HYGROMETER

- Highly precise chilled mirror dew point technology
- Measuring Range : -20 to +70 °C
- Accuracy :  $\pm 0.1^\circ\text{C}$
- Reproducibility:  $\pm 0.07^\circ\text{C}$
- User verifiable calibration



### PT 12 High Precision Multi-Channel Thermometer System

- Temperature Range : -200 to 660 °C
- Accuracy :  $\pm 2\text{ mK}$  @ 23 °C
- Resolution : 0.1 mK
- Twelve channel temperature measurement
- High precision, stability and repeatability
- Touchscreen user interface with graphing



### 973-SF6 ANALYZER

- Measuring Range: -50°C to 20°C
- % Volume SF6: 80 to 100%
- Accuracy:  $\pm 0.5^\circ\text{C}$  Dew/ Frost Point
- Optional SO2 measurement ppmv
- % Volume SF6 Accuracy: 0.5%
- Gas containment system with automatic pump back, No gas loss



Humidity Generation and Calibration Equipment  
**THUNDER SCIENTIFIC**  
 CORPORATION The Humidity Source

### Model 1220

#### Automated "Two-Pressure" Humidity Generation System

- 0.6% of Reading RH Uncertainty
- Relative Humidity Range: 10 to 98% RH
- Temperature Range : 5 to 60 °C
- Generate Multi Profile
- Test Chamber 8" x 8" x 8"
- Flow capability of 20L/ min
- Multi-Point Touch Display
- Window Door Option is Available



### Model 2500

#### Benchtop/Mobile "Two-Pressure" Humidity Generator

- 0.5% of Reading RH Uncertainty
- Relative Humidity Range: 10 to 95% RH
- Temperature Range : 0 to 70 °C
- 2500 ControLog® Automation Software
- Test Chamber 15" H x 15" W x 12" D
- Flow capability of 20L/ min
- 2500 ControLog® Automation Software
- Window Door Option is Available



### Model 3920

#### " Two-Pressure Two-Temperature " Low Humidity Generator

- Generate: %RH, FP, DP, PPM
- Based on NIST Proven Two-Pressure Principle
- High Flow Capability of 10 L/min
- Multi-point Touch LCD
- Relative Humidity Range: 0.00003% to ~50%
- Calculated Real-time Uncertainty
- HumiCalc with Uncertainty Mathematical Engine
- ControlLog Embedded Automation Software



### Model 2900 Automated

#### "Two-Pressure" Humidity Generation System

- 0.5% of Reading RH Uncertainty
- Relative Humidity Range: 10 to 98%
- Temperature Range: -10 to 72°C
- HumiCalc® with Uncertainty Software
- ControlLog Automation Software
- Generate: RH, DP, FP, PPM, Multipoint Profiles
- High Flow Capability of 50 L/min
- Multi-point Touch LCD
- Traceable to NIST & based on NIST





### MULTIFUNCTION TEMPERATURE CALIBRATORS LCB SERIES

- Temperature range -40 ... 165°C / 30 ... 255°C
- Resolution: 0.1/0.01/0.001°C
- Stability: 0.01 °C, Accuracy: 0.1 °C
- All in one Dry Block and liquid bath 0.7 liters
- Immersion Depth: 190 mm, diameter 60 mm
- Uniformity: 0.03 °C



### DRY WELL TEMPERATURE CALIBRATOR LHC 650 BASIC

- Temperature range +40 ... 650°C
- Resolution: 0.1°C
- Stability: 0.05 °C, Accuracy: 0.3 °C
- Compact design for on-site use
- Immersion Depth: 150 mm, diameter 28 mm
- Uniformity: 0.05 °C



### TEMPERATURE CALIBRATOR DRY BLOCK LBB 90

- Temperature range +30 ... 70°C with Accuracy 0.3°C
- Resolution: 0.1/0.01°C, Stability: ±0.03 °C
- Black body diameter 57 mm
- Emissivity: 0.96 ± 0.02



### PNEUMATIC PRESSURE TEST PUMP LMP 140

- Pneumatic hand pump pressure generator
- Pressure Range: -0.95....100/140 bar
- Resolution: 0.1 mbar, Medium : Air
- Connection: 3x M20 x1.5 Female
- Pressure relieve and fine adjustment valves



### PNEUMATIC PRESSURE CONTROLLER LPG 400

- Best Accuracy: 0.02%
- Pressure Range: relative 0 to 210 bar, absolute 0-50 bar
- Screen Resolution: 6 digits
- Connection: G 1/8 inch female

### PRECISION DIGITAL PRESSURE GAUGE IKA 300

- Best Accuracy: 0.025%
- Pressure Range: 1..0 bar, 0...2500 bar
- Display: 6 digit with backlight
- Connection: 1/2 inch BSP Male
- 9 units of engineering
- 7.4V lithium Battery, Battery life: 80 hours



## AccuMac Technology Inc



### AM 8060 PRECISION THERMOMETER

- Temperature Range: -260 °C to 850°C
- Accuracy up to ±0.008°C
- Resolution: 0.001°C
- Dual Channels



### AM 1850/1860 METAL SHEATH SPRT

- Temperature Range: -200 °C to 670°C
- Repeatability : ±0.0015°C
- W(Ga) ≥ 1.11807, W(Hg) ≤ 0.844235
- Inconel™ sheath provides durability
- Nominal Resistance: 25.5 Ω or 100 Ω



For Further Details Please Contact

## Advance Technical Systems Pvt. Ltd.

305, Pankaj Tower, Plot No.6, L.S.C., Mayur Vihar-I, Delhi-110091

Phone: +91-9310174458/011-42785888

e-mail: sales@atspltd.com/info@atspltd.com

Website: www.atspltd.com

(Detailed catalogue will be provided on request)