

SPECIFICATION FOR BLACK BODY CALIBRATION SOURCE

Source to calibrate Infrared thermometer in the range of 50°C to 1000°C with suitable internal sensor. PID controller and digital display for displaying the black body set point & Cavity temperature.

Technical Specification:

Temperature Range: 100 to 1000°C
Emissivity: 0.99
Stability: Better than 1°C
Display: Bright bold temperature indication for set, block and actual radiance temperature.
Accuracy: $\pm 2.0^\circ \text{C}$
Display resolution: 1°C
Cavity size: Between 10 and 75 mm.
Cavity Type: Removable to accommodate fixed-point cell to carryout calibration as per ITS-90.

Warm up Time from ambient to 1000°C : 2 hours
Power : Single Phase 210-250 V AC 50Hz
Traceable calibration : atleast at 3 point of the range. .

Mechanical details:

Dimensions : Compact table top
Weight : Less than 10Kg

Accessories:
Operation manual
Connecting supply cord
Spare fuses.
Factory Calibration Certificate

PLEASE NOTE:

1. The instrument offered can be better than the above specifications
2. Should have service facility in India to reduce the down time.
3. The product catalogue should contain only the product offered in depth preferably highlighting the model offered.
4. Two sets of original product catalogue to be enclosed with the offer.
5. Vendor should submit the offer with detailed specification of the product offered.
The offers given as **"as per your specifications"** will be rejected.

SPECIFICATION FOR SOUND LEVEL METER

Portable Hand held Battery operated with frequency weighting and digital indication

Technical specification:

Measuring range : 40 to 130 dB
Resolution : 0.1 dB
Accuracy : 2 dB
Display : 0.5" LCD minimum 3 1/2 digit
Sensor : Built in > 10 mm electrets condenser microphone
Error indication : over load
Frequency weighting : A, C and Linear
Response : slow and fast
Parameter : max hold facility
Battery : standard batteries
Preferable : rechargeable Ni-MH batteries with suitable charger
Battery indicator : battery low indicator
Output : analog DC proportional preferable
Operating temp range : 0 to 40 deg C
Relative Humidity : 0 to 90% non condensing
Size : hand held
Weight : less than 1 kg
Accessories : carrying protective case
Wind shield
Operating manual
Rechargeable batteries with charger
Suitable batteries for operation
Apart from above, all necessary accessories to operate the equipment to realize the above functions.
Sound level calibrator 110dB at 1KHz

It is preferable to have a data logging facility with ability to transfer, view and analyze the data on a computer. Vendors can quote for both model with and without data logging facility.

NOTE:

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2. Should have service facility in India with factory-trained engineers to take care of the equipment supplied, to reduce the down time.
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4. Two sets of product catalogue to be enclosed with the offer in original
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SPECIFICATION FOR 3 TONGS POWER ANALYSER FOR PG TEST AUX POWER

General:

Portable hand held rechargeable battery operated 3-phase power analyzer cum data logger for 3 phase 3 wire and 4 wires measurement with phase sequence indication.

Technical specification:

ELECTRICAL

AC VOLT	True RMS 0 to 600 volts with a least count of 0.1 volt and with a basic accuracy of 0.5% ± 10 digits
AC CURRENT	0 to 1000 amps with least count of 0.1 amp and with a basic accuracy of 1.0% ± 20 digits
POWER	Active, Reactive & apparent with an accuracy of 1.0% ± 20 digits
POWER FACTOR	-1.000 to + 1.000 with a basic accuracy of 3.0% ± 30 digits
FREQUENCY	47 to 53 Hz with a least count of 0.1 Hz and with a basic accuracy of 0.5% ± 10 digits
DATA LOGGING	Minimum 5 hours with a sampling time 1 second. Also with suitable software and connectivity to external PC
DISPLAY	Bright bold mlti LCD for all parameters with selectable back lighting
SUPPLY	Built in rechargeable Ni MH batteries and charger suitable for 230V AC

OPERATING ENVIRONMENT:

Temperature : 0 to 50 deg C
Relative Humidity : up to 0% non condensing

MECHANICAL

Size : Hand held operation
Weight : less than 1 Kg

ACCESSORY:

4 test leads with alligator clips for voltage measurement 4
current clamps
PC interface cable & software
Carrying case
Instruction/ operating manual
Factory calibration certificate.

NOTE:

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SPECIFICATION FOR PENN WALT HIGH ACCURACY STANDARD GAUGE

General Specification

Wallace & Tierman Pennwalt 'series 1500, 81/2" dial high accuracy pressure gauges with knife edge pointer and anti parallax error mirror covering the full scale in tow revolutions such that the least count measurable is 0.02 % of full scale. Bold graduations & numbers horizontally placed to make observation easy.

Technical Specification:

Range	: 0 to 1 kg Absolute (for vacuum measurement)
	: 0 to 1 Kg
	: 0 to 2 Kg
	: 0 to 4 Kg
	: 0 to 6 Kg
Accuracy	: 0.066% of FS
Repeatability	: 0.03% of FS
Temperature compensated	
Hysteresis	: 0.1% of FS
Thermal effect	: 0.1 % of FS per 10°C with respect to 25°C Reference temperature
Scale length	: approx 45" through 2 pointer revolutuion
Gauge dial meter	: 81/2 "
Case Pressure	: Open to atmosphere
Gauge case	: Metal case with tempered glass.
Zero adjustment	: Easily accessible from front and back of gauge
Medium	: Air
Process Connection	: 1/2 " BSP male through proper adaptor of stainless steel.
Additional Adaptor	: M20 x 1.5 male to 1/2 " BSP female adaptor of stainless steel

The above item is to be supplied with vibration protected padded wooden box to carry the instrument safely from one site to other.

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Should have service facility in India to reduce the down time.

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SPECIFICATION FOR THEODOLITE

S.No	Name of equipment.	Specification	purpose	Qty
01	THEODOLITE.	Total station – max'm flexibility. <ul style="list-style-type: none">- angular measurement.- Infrared Distance measurement.- Reflectorless distance measurement.- Accuracy 7" / 5" / 3".- Telescope Magn. 30X.- Distance Measuremt Infrared laser.- Range to leica prism 3500m.- Range of tape 250m.- Accuracy time per measurement. Range RL80m ; (TCR) 170m.- Accuracy normal mode 3mm +2ppm/sec.- Display type Alphanumeric 8 lines x 32 characters.- Slope sensor / 2axis Compensator.- Laser plummet.- Weight 5kg including battery.- Working environment , 20 c to + 50 c.dust / water IP54.- Construction total stn for all round measurements.	Checking of columns at height of 100 Mts and collimation alignment of lines.	01

SPECIFICATION FOR PARAGON JIG TRANSIT.

01	PARAGON JIG TRANSIT.	Equiped with right angle eyepiece &Autocollimation SPECFITN: <ul style="list-style-type: none">- MAIN TELESCOPE- Length 11.25"- Magnification 30x.- Focus range 8"- revolving power 4 second of Arc.- Field of view 55 minutes at infinity.- Effective aperture 30 mm- Eye piece revolving blank & Autocollimation.- Cross axis telescope 13" long. With achromatic.- Magnification 28x.- Revolving power 4 second Arc.- Field view 50.5 minutes at infinity.- Effective aperture 21mm.- Rectile All urpose,double glass,dust proof,crosspattern with single lineintwo quadrant.- Height 13"- Center cylindrical, with high precision thrust ball brg mounted.- Level telescope: sensitivity of 20 second of Arc / 2mm movement.- Screws levelling. Four with precision generated threads fully enclosed.- Tangent two speed fine motionfor both azimuth & elevation motions.- Weight 37 Lbs.- Pargoan Jig Transit & TELESCOPE SQUARE with horizontal axis telescope	Checking of verticality as well as alignment readings.	01
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