CERTIFICATE OF CALIBRATION

Reflecting the Truth

Issued By :

YADAV MEASUREMENTS PVT. LTD.
PLOT No. 19-20, HARIDAS JI KI MAGRI
TRIDENT ROAD, UDAIPUR (RAJ.), INDIA 313004
Email # yadav.measurements@ymllabs.com
Phone No. : 0294-2434050 Telefax : 0294-2434067

C-035
Electro- Technical

UKAS CALIBRATION
0616

Certificate number:-YMPL/91677/11416

1.	Name and address of client :-	SONAA ENGINEERS PVT. LTD. 308-310 SUBHAM COMPLEX NEW FETEHPURA, UDAIPUR (RAJ.)
2.	Reference:	
	Service request form number:	2006-2007/1609
	Date:	17th February, 2007
	Date of the receipt of the equipment:	17th February, 2007
	Condition on item:	Satisfactory
3.	Calibration certificate:	
	Date of issue:	22nd February, 2007
	Date of calibration:	17th February, 2007
	Calibration due date:	17th February, 2010
4.	Description of equipment under calibration: -	
	Name:	DIGITAL AMMETER
	Serial number:	214045
	Model:	SPM45
	Make :	MECO
5.	Environmental conditions of measurements:	
	Temperature	25±2°C
	Relative humidity:	≤70%

6. Description of reference standards used :

Reference standard	Calibration valid upto	Traceability	Parameters
Multi product calibrator, Model:5500A, Make: Fluke I/S No. 745	6th December, 2007	ETDC, Bangalore via YMPL standards	a.c. current

Remarks :-

1. For k=2
   The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS/NABL requirements. [✓]
2. For k≠2
   The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k, which for a t-distribution corresponds to a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements. [X]
3. This report is specific for E.U.C. for environmental and other conditions mentioned in this report. [ ]
4. The reported uncertainty applies only to the measured value and gives no indication of the long term stability of the device [ ]
5. The instrument has been calibrated for calibration points required by customer [ ]
6. The calibration due date has been mentioned as requested by customer in writing [ ]

Checked by : RMP RSD

Approved by : Dinesh Paliwal

Sign. :

Name : DPS

CERTIFICATE OF CALIBRATION UKAS Accredited calibration laboratory No. 0616 NABL Accredited calibration laboratory No. C-035	Issued by : Yadav Measurements Pvt. Ltd., Udaipur

7. Calibration procedure :OP/YMPL/03
Equipment under calibration was calibrated for a.c. current by injecting it from Multi product calibrator.
At least 6 measurements were made for each value and an average was reported. EUC was powered up from auxiliary supply 240V, 50Hz and warmed up for at least 15 Minute.

8. Results: The Digital ammeter has been calibrated for a.c. current measurement. The expanded uncertainty of our measurement is given in front of each measurement & calculated at 95 % CL. The results are as following.

9. **Calibration results:-**

Parameter	Range	Measured value	Standard value	± Expanded uncertainty (%)	Coverage factor(k)
A.C. current: (50Hz, sine wave)	0-5A	0.050A	0.0500A	1.11	2.00 *
		0.100A	0.1000A	0.59	2.00
		0.502A	0.5001A	0.15	2.00
		1.004A	1.0002A	0.16	2.00
		2.009A	2.0001A	0.14	2.00
		5.030A	5.0013A	0.12	2.00

REMARKS:

1. "*" indicates that the uncertainty quoted is dominated by the uncertainty due to resolution of the instrument being calibrated, for which a rectangular probability distribution has been assumed.

Checked by : RMP RSD	Approved by : DDR