



**Energy Management Centre - Kerala**  
**(Department of Power, Govt of Kerala)**

**CERTIFICATE OF EMPANELMENT**

*This is to certify that **M/s. Mitcon Consultancy & Engineering Services Ltd**, (1st Floor, Agriculture College Campus Next to DIC Office, Shivajinagar, Pune – 411 005), is empanelled as Energy Audit firm in Energy Management Centre Kerala to conduct mandatory energy audit as per Government of Kerala G.O (Rt) No.2/2011/PD dated 01.01.2011.*

**Empanelment No:**  
**EMCEEA- 2412F-1**

<b>Scope/Area</b>	<b>Building</b>	<b>Industry -Electrical</b>	<b>Industry Thermal</b>
	Yes	Yes	Yes

*This empanelment is valid up to 31<sup>st</sup> October 2018*

*Issuing Date: 25/04/2016*

*Place: Thiruvananthapuram*

Director,  
Energy Management Centre Kerala

**Information of firm**

1.	Name & address of the firm	<b>MITCON Consultancy and Engineering Services Ltd.</b> Agriculture College Campus, Next to DIC Office, Shivaji Nagar, Pune – 411 005, INDIA
□	Office(with STD)	+91-20-66289401
	Mobile	098226 84106
	Fax number	+91-20-2553 0307
2.	Website (if any)	<a href="http://www.mitconindia.com">www.mitconindia.com</a>
3.	Email address	d e e p a k . z a d e @ m i t c o n i n d i a . c o m
4.	Name ,Designation and address of Contact person	Deepak Zade Sr. Vice President Energy & Carbon Services  MITCON Consultancy and Engineering Services Ltd. Agriculture College Campus, Next to DIC Office, Shivaji Nagar, Pune – 411 005, INDIA
5.	Office(with STD)	+91-20-66289401
	Residence(with STD)	-
	Mobile	098226 84106
6.	Email address	d e e p a k . z a d e @ m i t c o n i n d i a . c o m
7.	Year of establishment	1982
8.	Year of commencement of energy audit by the firm.	
9.	No. of branch offices  (List of complete addresses including heads of all branch offices with telephone, fax and email addresses)	<b>Mumbai office:</b>  Contact Person: Mr. Lajim Shaikh Mobile : 08355887916 1402/1403, 14th Floor, Dalamal Towers, Free Press Journal Marg, 211 Nariman Point, Mumbai- 400 021 Tel: +91-22-22828200 Fax: +91-22-22024553  <b>Delhi office:</b>  Contact Person: Mr. Paurush Godhar Mobile : 07827837482 807, Mercantile House, KG Marg, Connaught Place,

New Delhi – 110 001  
Tel: +91-11-43505238

**Chennai office:**

Contact Person: Mr. Karthik  
Mobile : 09443036671  
Module 4A, 4th Floor, No. 9,  
Rain tree Place,  
Mc Nichols Road,  
Chetpet, Chennai – 600 031  
Tel: +91- 44- 43805461

**Ahmedabad office:**

Contact Person: Mr. Mohit Saraswat  
Mobile : 08285047307  
Unit No.15, 2nd Floor  
Ratna Business Square,  
Ashram Road, Opp. H. K. College,  
Ahmedabad-380 009  
Tel: +91- 79 - 40394692/90

**Nagpur office:**

Plot No.125, Shri Ganesh Snehal  
Apartments, 1st Floor, Beside  
Shraddhanand Anathalay, South  
Ambazari Road, Nagpur – 440 010  
Tel: +91-712-2242878  
Fax: +91-712-2242878

**Bangalore office:**

Contact Person: Mr. B.M. Sajjan  
Mobile : 09164007067  
#605, level 6, 5th Floor,  
Prestige Atrium, Central Street,  
Off : Infantry Road, Shivaji Nagar  
Bangalore- 560001  
Tel: +91- 80 - 41125695  
Mobile: 09164007067  
Email: [sajjan@mitconindia.com](mailto:sajjan@mitconindia.com)

## Details of Associated Energy Experts and Audits Conducted by firm

1. Number of resource persons available : 08 (List attached)

2. Number of full-time energy auditors in position, with work experience of all energy auditors associated with the firm : 04 (Details are as below)

Sr. No.	Name of the Key Persons	Position	Qualification	Experience
1.	Mr. Deepak Zade	Sr. Vice President	<ul style="list-style-type: none"> <li>- Diploma in Mech. Engg.</li> <li>- Bachelor of Engg. (Mech.)</li> <li>- Master of Technology (Energy Management)</li> <li>- Chartered Engineer</li> </ul>	19 Years
2.	Mr. Pushkar Khanna	Chief Consultant	<ul style="list-style-type: none"> <li>- Diploma in Chemical Engineering</li> <li>- Bachelor of Engineering (Chemical)</li> <li>- Diploma in Business Administration</li> <li>- Accredited Energy Auditor <b>(AEA-0260)</b></li> <li>- Certified Energy Auditor <b>(EA-0648)</b></li> </ul>	25 years
3.	Mr. Paurush Godhar	Chief Consultant	<ul style="list-style-type: none"> <li>- Bachelor of Technology, Electronics Instrumentation &amp; Control Engineering</li> <li>- Accredited Energy Auditor <b>(AEA-0224)</b></li> <li>- Certified Energy Auditor <b>(EA-15390)</b></li> </ul>	7 years
4.	Mr. Vivek Nigam	Sr. Consultant	<ul style="list-style-type: none"> <li>- Bachelor of Technology (Electrical &amp; Electronics Engineering)</li> <li>- Certified Energy Auditor, <b>(EA-19343)</b></li> <li>- Certified M &amp; V professional</li> </ul>	6 Years
5.	Mr. Loveneesh Khurana	Sr. Consultant	<ul style="list-style-type: none"> <li>- Bachelor of Engineering (Electronics)</li> <li>- Certified Energy Auditor <b>(EA 20888)</b></li> </ul>	5 Years
6.	Mr. Mohit Saraswat	Chief Consultant	<ul style="list-style-type: none"> <li>- Bachelor of Engineering (Electrical)</li> </ul>	5 Years
7.	Mr. Chintan Shah	Project Consultant	<ul style="list-style-type: none"> <li>- Master of Technology (Energy)</li> <li>- Bachelor of Engineering (Electrical)</li> </ul>	5 Years
8.	Mr. Mitesh Bhoir	Sr. Consultant	<ul style="list-style-type: none"> <li>- Bachelor of Engineering (Electrical)</li> </ul>	5 Years

3. No. of part-time energy auditors in position during the current year / previous year associated with the firm: 04

Sr. No.	Name of the Key Persons	Certification	BEE registration Number
1	Mr. Kamal Goyal	Energy Auditor	EA - 27111
2	Mr. Mohammad Mohtasib	Energy Auditor	EA - 6676
3	Mr. Nikhil Mohite	Energy Manager	EA – 25501
4	Mr. Prashant Gogle	Energy Auditor	EA - 11576

4. Sectors in which the energy audit firm has conducted energy audits since inception and number of audits in each sector

**No. of sectors : 28**  
**Number of energy audits conducted since inception : More than 1000**

5. Energy audit process system (list sectors)

**No. of sectors: 05** (Chemicals / Pharmaceuticals/Petrochemicals, Food Processing, Refinery, Fertilizers & Acid Plants, Chlor and Alkali)

6. Energy audit Thermal Utility system (list sectors)

**No. of sectors: 08** (Textile, Paper, Rubber & Tyre, Explosive, Suger/Distillery, Steel / Re-rolling Mills, Glass, Power Plants & Co-gen Units)

7. Energy audit Electrical Utility Units (list sectors)

**No. of sectors: 15** (Foundry, Engineering, Plastic, Hotels & Commercial Establishment, Water Works, Plywood, Demand Side Management Studies, Gems & Jewelers, Mines & Ores, Hospitals, Safety Audits, Water Audits, Hydro – Geological Survey & Rain Water Harvesting System, Others, Distribution Company)

## 8. Instruments available (List of instruments)

### Pune office:

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1		Energy Audit Kit No. 2	
1.	Demand Analyzer & Energy Explorer - Quantity – 4 nos.	<ul style="list-style-type: none"> <li>Suitable for three phase and single phase measurements</li> <li>Continuous measurement of 156 electrical parameters like voltage, current, frequency, harmonics distortion, active &amp; reactive power, power factor etc.</li> <li>Compatible to PC for data downloading</li> </ul>				
2.	Clamp on Power Meter & Portable Digital Power Analyser - Quantity – 6 nos.	<ul style="list-style-type: none"> <li>Instantaneous three &amp; single phase electrical measurements like active &amp; reactive power, frequency, power factor, phase angle, voltage, current etc.</li> </ul>	0 - 1200 kW 0 - 600 Voltage, AC 0 - 800 Voltage, DC 0 - 2000 A, Current, AC / DC		0 - 750 kW 0 - 600 Voltage, AC 0 - 600 Voltage, DC 0 - 1000 A, Current, AC / DC	
3.	Photo Tachometer - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>Rotation measurements</li> <li>Non-contact type</li> <li>Contact type</li> </ul>	Range Accuracy	0 - 1,00,000 rpm +/- 0.05%	Speed Range i. Photo Tach. ii Contact Tach. iii. Accuracy	2.5 – 99,999 rpm 0.5 – 19,999 rpm +/- 0.05%
4.	Lux Meter - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>Light intensity measurements</li> <li>Digital display</li> <li>Non-contact type</li> </ul>	Lux level Accuracy	0 - 50,000 lux +/- 0.5%	Lux level Accuracy	0 – 2,00,000 lux +/- 0.5%
5.	Thermo Anemometer - Quantity – 3 nos.	<ul style="list-style-type: none"> <li>Wind velocity measurements</li> <li>Wind temp. measurements</li> </ul>	Velocity Temp.	0 - 45 m / sec. 0 – 60 °C	Velocity Temp.	0 - 45 m / sec. 0 – 60 °C

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1		Energy Audit Kit No. 2	
6.	Ultrasonic Flow Meter & Dual Frequency Portable Doppler Flow Meter  Quantity – 4 nos.	<ul style="list-style-type: none"> <li>Water flow measurement</li> <li>Non-contact type</li> </ul>	Flow range Pipe size Fluid  Accuracy	0 – 15 m/sec. 25 – 7500 mm Homogeneous liquids without gas bubbles +/- 0.5%	Flow range Pipe size Fluid  Accuracy	0.06 – 10 m/sec. 12 – 5000 mm It can accept turbidity samples upto 5000 mg / liter such as ground water remediation flow, contaminated ground water, sewage treatment flow, raw sewage flow transmitters, sewage plant flow meters, pump protection flow switches, wastewater and treatment flow meters, slurries and slurry flow measurements, sludge velocity meters, abrasives +/- 0.5%
7.	Flue Gas Analyzer  - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>Displays % O<sub>2</sub>, stack temp. &amp; CO</li> <li>Calculates % CO<sub>2</sub>, % excess air and boiler efficiency</li> <li>Holds readings for six samples</li> </ul>	O <sub>2</sub> CO Temp. Fuel selection  Accuracy	0 to 20.9 % 0 to 4000 ppm 350 °C (Max.) FO, LSHS, LDO, Natural gas, Biogas, Husk, Coal O <sub>2</sub> +/- 0.5% CO +/- 50 ppm	O <sub>2</sub> CO Temp. Fuel selection  Accuracy	0 to 21 % 0 to 10000 ppm 600 °C FO, LSHS, LDO, Natural gas, Biogas, Husk, Coal  O <sub>2</sub> +/- 0.5% CO +/- 50 ppm

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1		Energy Audit Kit No. 2	
8.	Infrared Thermometers - Quantity – 3 nos.	<ul style="list-style-type: none"> <li>• Measurement of surface temp. which are un-suitable for traditional contact measurement methods</li> <li>• Non-contact type</li> </ul>	Range	- 40 °C to 800 °C	Range	- 40 °C to 800 °C
9.	Relative Humidity and Temperature Indicator - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>• RH measurement</li> <li>• Temperature measurement</li> </ul>	RH Temp.	10 to 95% 0 – 65 °C	RH Temp.	10 to 95% 0 – 65 °C
10.	Thermal Imager - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Thermal images</li> <li>• Temperature profile curves</li> <li>• Histograms</li> </ul>	--	--	Temp. Range Accuracy	- 10 to 350 °C +/- 2 °C



Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1		Energy Audit Kit No. 2	
11.	Global Positioning System - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Map &amp; way point manager for transferring waypoint</li> <li>Route and track data between GPS and PC</li> </ul>	--		10,000 point track & stores 1000 waypoint & 50 routes	
13.	Digital Thermo Hygro Meter - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>Temperature &amp; humidity display</li> </ul>	--		Temp. Range Humidity Range	10 – 60 °C 20 – 95 % RH
14.	Digital Pitot Tube - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Precise differential pressure measurement</li> <li>Built-in density compensation</li> </ul>	--		Pressure Velocity Range	0 to 100 hpa 5 to 100 m/s
15.	Ultrasonic Leak Detector - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Detects &amp; locates</li> <li>Pressure or vacuum leak</li> <li>Air leak detection</li> <li>Leak of any gas</li> <li>Leak in a pressure less system</li> <li>Bearing noise</li> <li>Non-contact type</li> </ul>	Sensing distance  Battery backup	Leak at 5 psi through 0.01 mm dia orifice from a distance of 30 to 40 feet  80 hours	--	--

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1		Energy Audit Kit No. 2	
17.	Hot Wire Anemometer  - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>• Thermal anemometer for very low velocity measurement</li> <li>• Precise measurement</li> <li>• Records maximum and minimum reading with recall</li> </ul>	Air velocity Temperature Accuracy	0.2 to 20 m/s 0 to 50 °C +/- 5%	Air velocity Temperature Accuracy	0.2 to 20 m/s 0 to 50 °C +/- 5%
			Operating humidity less than	80%	Operating humidity less than	80%
19.	Altimeter - Quantity – 2 nos.	<ul style="list-style-type: none"> <li>• Head Measurement</li> </ul>	--		--	
20.	Pressure Gauges - Quantity – 4 nos.	<ul style="list-style-type: none"> <li>• Pressure Measurement</li> </ul>	--		--	

## Delhi Office:

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1	
1.	Demand Analyzer & Energy Explorer - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Suitable for three phase and single phase measurements</li> <li>Continuous measurement of 156 electrical parameters like voltage, current, frequency, harmonics distortion, active &amp; reactive power, power factor etc.</li> <li>Compatible to PC for data downloading</li> </ul>		
2.	Clamp on Power Meter & Portable Digital Power Analyser - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Instantaneous three and single phase electrical measurements like active and reactive power, frequency, power factor, phase angle, voltage, current etc.</li> </ul>	0 - 1200 kW 0 - 600 Voltage, AC 0 - 800 Voltage, DC 0 - 2000 A, Current, AC / DC	
3.	Photo Tachometer - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Rotation measurements</li> <li>Non-contact type</li> <li>Contact type</li> </ul>	Range Accuracy	0 - 1,00,000 rpm +/- 0.05%
4.	Lux Meter - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Light intensity measurements</li> <li>Digital display</li> <li>Non-contact type</li> </ul>	Lux level Accuracy	0 - 50,000 lux +/- 0.5%
5.	Vane Type Anemometer - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Wind velocity measurements</li> <li>Wind temp. measurements</li> </ul>	Velocity	0 - 45 m / sec. 0 – 60 °C
6.	Ultrasonic Flow Meter - Quantity – 1 no.	<ul style="list-style-type: none"> <li>Water flow measurement</li> <li>Non-contact type</li> </ul>	Flow range Pipe size Fluid  Accuracy	0 – 15 m/sec. 25 – 7500 mm Homogeneous liquids without gas bubbles +/- 0.5%

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1	
7.	Flue Gas Analyzer - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Displays % O<sub>2</sub>, stack temp. &amp; CO</li> <li>• Calculates % CO<sub>2</sub>, % excess air and boiler efficiency</li> <li>• Holds readings for six samples</li> </ul>	O <sub>2</sub> CO Temp. Fuel selection  Accuracy	0 to 20.9 % 0 to 4000 ppm 350 °C (Max.) FO, LSHS, LDO, Natural gas, Biogas, Husk, Coal O <sub>2</sub> +/- 0.5% CO +/- 50 ppm
8.	Infrared Thermometer - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Measurement of surface temp. which are un-suitable for traditional contact measurement methods</li> <li>• Non-contact type</li> </ul>	Range	- 40 °C to 800 °C
9.	Relative Humidity and Temperature Indicator - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• RH measurement</li> <li>• Temperature measurement</li> </ul>	RH Temp.	10 to 95% 0 – 65 °C
10.	Thermal Imager - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Thermal images</li> <li>• Temperature profile curves</li> <li>• Histograms</li> </ul>	--	--
11.	Digital Thermo Hygro Meter - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Temperature &amp; humidity display</li> </ul>	--	--
12.	Digital Pitot Tube - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Precise differential pressure measurement</li> <li>• Built-in density compensation</li> </ul>	--	--
13.	Ultrasonic Leak Detector - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Detects &amp; locates -</li> <li>• Pressure or vacuum leak, air leak detection, leak of any gas, leak in a pressure less system, Bearing noise, non-contact type</li> </ul>	Sensing distance  Battery backup	Leak at 5 psi through 0.01 mm dia orifice from a distance of 30 to 40 feet 80 hour

Sr. No.	Instrument Name	Features	Energy Audit Kit No. 1
14.	Stop Watch - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Time measurement</li> </ul>	--
15.	Portable Ultrasonic Gas Flow Meter  - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Gas flow meter for natural gas for 3/4" to 12"</li> <li>• Process temp range - 40 to 230°C</li> <li>• Temperature range - 160 to 260°C (-256 to 500° F), per tub</li> <li>• Process temp range - 40 to 230°C for 2 x pipe circumference, 9 inches wide, maximum temperature 150°F (66°C). 12 inch pipe</li> </ul>	PT878GC
16	Vibration Analyzer meter  - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Vibration monitoring</li> <li>• Frequency range - 10Hz to 1 kHz</li> <li>• Velocity range – 200 mm/s</li> <li>• Acceleration range – 200 m/s<sup>2</sup></li> <li>• Accuracy +-(5% + 2D)</li> </ul>	VB-2801HA
17	LCR meter  - Quantity – 1 no.	<ul style="list-style-type: none"> <li>• Used for checking capacitance / resistance &amp; impedance</li> <li>• Temperature range - 20 to 750°C</li> <li>• Input impedance - 1M OHM</li> <li>• Accuracy- +(2%rdg + 3 %dgts)</li> </ul>	

**Ahmedabad office:**

Sr. No.	Instrument Name	Make	Model	Range	Accuracy	Features
1	Digital Lux Meter	Testo	Testo 540	0-50000 Lux	± (5%+2d)	Display-18 mm, Sampling Time-0.4 Sec., Operating Temp.- 0 to 50 °C, Humidity- Less than 80%, Power Supply- DC 9V Battery
2	NANOVIP-1 with Voltage Probe	Elcontrol Energy	Nanovip Plus	0-600 V AC/DC, 0-1000 A	0.3 % FS+ 0.3 % Rdg	Voltage - 600V AC/DC, Frequency- 0Hz to 600 Hz, Power Values- (W, VA, Var, PF, CosØ), Energies-(kWh, kVAh, kVArh), Harmonics- Up to 24th, THD, Memory 1 GB, Power Supply- 1.5 V Battery cell, Ambient Temp. Range- 10 to 50 °C
A	200 A CT	Elcontrol Energy	Elcontrol Energy	0-200 A		
B	5 A CT	Elcontrol Energy	Elcontrol Energy	0-5 A		
C	1000 A CT	Elcontrol Energy	C107EL	3-1000 A		
3	Energy Explorer Power Analyser 3 Phase	Krykard	ALM 35	0-1000 V	± (0.5%+1A)	Voltage - 10V to 1000V AC/DC, Frequency- 40Hz to 69 Hz, Power Values- (W, VA, Var, PF, DPF, CosØ, tanØ), Energies-(kWh, kVAh, kVArh), Harmonics- Up to 50th Order Phase wise, THD, Transients-300, Flicker, Inrush mode, Unbalances, Memory 2 GB, Waveforms displayed, Battery back-up up to 8 hr,
A	1000 A CT (4 qty)	Krykard	C193	3-1000 A		
B	100 A-5 A (4 qty)	Krykard	MN 93 A	5-100 A		
C	Amp FLEX (4 qty)	Krykard		10-6500 A		
4	Flue Gas	ACE	ACE-9000	O2 - 0 to 21%, CO - 0 to 5000 PPM, CO2 - 0 to 21%, EA- 0 to 850%, SO2-0 to 5000 PPM, NO2-0 to 5000 PPM,	O2- ±2 %, CO- ± 2%, CO2- ±5%, EA- ±1 %, SO2- ± 2%, NO2- ± 2%, Effi.- ± 0.1 %, Temp. ± 3%	8 Character Dot matrix display, Membrane polycarbonate key board, Power Supply- 9V with rechargeable Dry Cell
A	Flue Gas Probe 1.5 FT	ACE		0-600 ° C		Suitable for 0 to 600 °C temp., 30 cm rigid section with paper plug, 2 mtr. Flexible cable
B	Flue Gas Probe 3 FT			0-600 ° C		
5	Digital Thermometer	Testo	AG925	-50 to 1000 ° C	± (0.5 ° C + 0.3% vw) (-40 to +900 ° C)	large, illuminated display, display of the current values, continuous display of the min / max values, hold function for holding the measured

Sr. No.	Instrument Name	Make	Model	Range	Accuracy	Features
					$\pm (0.7^\circ \text{C} + 0.5\% \text{vw})$ (residual measuring range)	values, audible alarm when the limit value is exceeded
6	Digital Clamp Meter	Meco	3150	0-1000 A AC, 0-1000 V DC, 0-750 V AC, 40 $\Omega$ to 40M $\Omega$ , 0-50 Hz, 40nf to 100 $\mu$ F	$\pm 2\%$ in A, $\pm 0.7\%$ in DCV, $\pm 1\%$ in ACV, $\pm 1.2\%$ in $\Omega$ , $\pm 0.5\%$ in Hz, $\pm 5\%$ in $\mu$ F	Continuity check 40 $\Omega$ , Diode Test- 1 mA, 3 <sup>3/4</sup> LCD Display, Measurement Rate- 3 times per sec, Operating Environment- 0 to 50 $^\circ$ C, < 70% R.H, Maximum Jaw Opening- 43 mm Dia. & Flats 65mm x 16 mm, Power Supply- 1.5 V "AAA" Size battery.
7	Digital Insulation Tester	Meco	DIT 99E	1000 V	$\pm 1\%$	Dielectric strength: 3.5kV @ 50Hz for 1 min. between Input terminals and case
8	Digital Earth Tester	Waco	1000 ohms range	0-1000 $\Omega$	$\pm 2\%$	It is easy to use and since it is quite small it can be hand held. It contains four terminals to measure Earth resistance as well as soil resistivity. The display also indicates low battery.
9	NANOVIP-2 with Voltage Probe	Elcontrol Energy	Nanovip Plus	0-600 V AC/DC, 0-1000 A	0.3 % FS+ 0.3 % Rdg	Voltage - 600V AC/DC, Frequency- 0Hz to 600 Hz, Power Values- (W, VA, Var, PF, Cos $\phi$ ), Energies-(Kwh, kVAh, kVArh), Harmonics- Up to 24th, THD, Memory 1 GB, Power Supply- 1.5 V Battery cell, Ambient Temp. Range- 10 to 50 $^\circ$ C
A	1000 A CT	Elcontrol Energy	C 107	0-200 A		
B	200 A CT	Elcontrol Energy	Elcontrol Energy	0-5 A		
C	5 A CT	Elcontrol Energy	Elcontrol Energy	3-1000 A		
10	Temp. & Humidity Meter	Testo	Testo 610	-10 to 50 $^\circ$ C, 0 to 100 % RH	$\pm 0.5^\circ \text{C}$ , $\pm 2.5\%$ RH	Protection Class- IP20, Ambient Temp. -10 to 50 $^\circ$ C, Power Supply- 1.5 V "AAA" Battery
11	Photo Tachometer	Lutron	DT2236	5 to 99999 RPM	$\pm (0.05\% + 1 \text{ Digit})$	Detecting Distance- 50 to 150 mm (Typical Max. 300 mm), Operating Temp. -10 to 50 $^\circ$ C, Power Supply- 1.5 V "AA" Battery
12	Thermal Imager with Accessories		Testo-881v5	0 to 550 $^\circ$ C	$\pm 3\%$	Operating Humidity- 0-100% RH, Operating Temp.- 0-70 $^\circ$ C, , Accuracy of Radio Probe- $\pm 2\%$ of RH and $\pm 5^\circ \text{C}$ , <b>Standard Measurement-</b> 1 Point Measurement, 2 Point Measurement, Cold Spot/ Hot Spot, Isotherm, Emissivity- 0 to 1.
A	High Temperature Sensor					

Sr. No.	Instrument Name	Make	Model	Range	Accuracy	Features
13	Ultrasonic Flow Meter	Siemens	FUP-1010	± 12 m/s, Bidirectional	± 0.5 % to 2 % of Flow for Velocity greater than 0.3 m/s	Pipe size 0.75" to 360", Liquid Temp. -40 to 250 °C, Protection-IP67, Transducer Type- C3 (2" to 12") & D3 (8" to 24") pipe size
A	Transducer C3 & D3					
B	Transducer Clamp with Loose Chain					
C	Charger					
D	Flow Meter Cable					
14	Multifunction Instrument		Testo-435-4			
A	Temperature Surface Probe			-50 to +150 °C	± 0.2 °C	Type "K" thermocouple
B	Telescopic Vane Probe			0.6-40 m/s for 16 mm, 0.25-20 m/s for 60 mm, 0.3- 20 m/s for 100 mm		Length 890 mm , Ø 16 mm
C	Pitot Tube			0-600 °C		1000 mm Long, Ø 7mm
15	Digital Pressure Gauge	Keller	Leo-2	0 to 30 Kg/cm2	0.10%	G 1/4" Connection
16	Grinder	Hitachi	G 10SS			
17	Pressure Gauge 7 KG	pointer ()	SP100GFS6 4DB38 B	0-7 kg/ cm2	± 1% FSD	Measures static pressure developed across water pipeline
18	Pressure Gauge 5 KG	pointer ()	SP100GFS6 4DB38 B	0-5 kg/ cm2	± 1% FSD	Measures static pressure developed across water pipeline
19	Pressure Gauge 3 KG	pointer ()	SP100GFS6 4DB38 B	0-3 kg/ cm2	± 1% FSD	Measures static pressure developed across water pipeline
20	Infrared Thermometer	Testo	805i	-30 to +250 °C	±1.5 °C or ±1.5 % of mv (0 to +250 °C) ±2 °C (-20 to -0.1 °C) ±2.5 °C (-30 to -20.1 °C)	Measures non-contact temperature, Optic target ratio (10:1), Measurement area indicated by circular laser pattern assures accurate assessments, Photograph objects with smart device, capturing measurement marker and temperature values for reference and reporting
21	Distance Meter	Fluke	414 D	0-50 m	± 2 mm	Measurement of length, area and volume
22	Sling Psychrometer	Zeal		-10 to +50 °C	0.5 °C	Measurement of dry bulb and wet bulb



Sr. No.	Instrument Name	Make	Model	Range	Accuracy	Features
	(2 Nos.)					temperature of air
23	Calorimetric flow meter	Buhler Electronics	SF586b	0.5-65 m/s -5 to 200 °C, 16bar	0.0062 m/s	Inline compressed air, furnace draft air flow measurement

## 9. Details of Curriculum Vitae of MITCON team Members

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.
<b>Name of Staff</b>	Deepak Zade
<b>Current Position</b>	Sr. Vice President
<b>Years with Firm</b>	21 Years
<b>Nationality</b>	Indian
<b>Relevant Experience</b>	
<p>✓ Dedicatedly working for promotion, implementation &amp; follow through of energy efficiency &amp; conservation, renewable energy, environment management and climate change sectors since last 15 years</p> <p>✓ Project leader for more than 300 energy audit &amp; implementation assistance assignments in commercial &amp; industrial sectors like forging, foundry, pulp &amp; paper, commercial buildings, textile, chemical, pharmaceuticals, petro chemicals, engineering, water works, food processing, hotel industry, Ag-DSMs and Mu-DSMs., etc.</p> <p>✓ Team leader for following impact assessment studies -</p> <ol style="list-style-type: none"> <li>1. Conduct of Load Research at Five Divisions – North, Central, South Central, South and East within MCGM and MBMC Area as per MERC guidelines(Impact Assessment Study of Reliance’s Demand Side Management, Energy Efficiency and Energy Conservation Programs)</li> <li>2. Conducting Baseline Energy Audits of the Designated Consumers under the Performance Achieve and Trade (PAT) Scheme for PNP – 5 and TXL – 5 Groups for EESL</li> <li>3. Impact Assessment / Evaluation of ECBC scheme implemented during 11th five year plan period for BEE</li> <li>4. Monitoring &amp; verification of Agriculture Demand Side Management Project</li> <li>5. Evolution of MNRE scheme / program on small hydro power implemented during 10th year plan period</li> <li>6. Third Party Inspection of Solar Thermal Systems installed under Jawaharlal Nehru National Solar Mission – Offgrid Scheme for MNRE</li> <li>7. Project leader for various prestigious consultancy assignments like <ol style="list-style-type: none"> <li>1. UNDP – GEF – Ministry of Steel project on removal of barriers for energy efficiency in SRRM sector</li> <li>2. Demand Side Management Studies (Agriculture / Municipal / Utility) for BEE &amp; Various Utilities</li> <li>3. Dissemination of Divided Blast Cupola in Kolhapur Foundry Cluster for TERI – SDC project</li> <li>4. World Bank – SIDBI – BEE Project for Pune Forging Cluster</li> </ol> </li> </ol> <p>✓ Team leader for various consultancy assignments in solar, wind small hydro &amp; biomass power sector. Instrumental in commissioning over 100 MW projects, all over India.</p> <p>✓ Team leader for various consultancy assignments in climate change sector. Registered over 86 projects with Gold standard, Clean Development Mechanism &amp; Voluntary Carbon Standard. Instrumental in syndicating about INR 56 crores of carbon funds for various Indian project promoters.</p> <p>✓ Team member for various policy &amp; international assignments</p> <p>✓ Organized &amp; attended numerous business meets, training programmes &amp; workshops at National &amp; International Levels</p> <p>DISCOM/Demand Side Experience:</p> <p>✓ Load Research and Analysis (EESL Project) for DISCOM like</p> <ul style="list-style-type: none"> <li>• H.P</li> <li>• J &amp; K</li> <li>• Chamundeshwari Electricity Supply Ltd, Mysore, Karnataka</li> <li>• Gulbarga Electricity Supply Ltd, Gulbarga, Karnataka</li> </ul> <p>✓ Reliance Infrastructure Ltd, Maharashtra-Demand Side Management</p> <p>✓ TATA Power Co.- MERC, Maharashtra, DSM Program</p> <p>✓ Bureau Of Energy Efficiency, IGEA, Mu DSM</p> <p>✓ Bureau Of Energy Efficiency, Ag DSM, Maharashtra</p>	

- ✓ Bureau of Energy Efficiency, Ag DSM, Gujarat
- ✓ Bureau of Energy Efficiency, Ag DSM, Andhra Pradesh

**Employment Record**

April 2010 – till date	Sr. Vice President	MITCON Ltd., Pune
April 2005 – March 2010	Exec. Vice President	MITCON Ltd., Pune
May 2000 – March 2005	Chief Consultant	MITCON Ltd., Pune
May 1999 – April 2000	Senior Consultant	MITCON Ltd., Pune
May 1998 – April 1999	Project Consultant	MITCON Ltd., Pune
June 1997 – April 1998	Management Trainee	MITCON Ltd., Pune

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.	
<b>Name of Staff</b>	Pushkar Khanna ( <b>Accredited Energy Auditor</b> )	
<b>Current Position</b>	Chief Consultant	
<b>Years with Firm</b>	21 Years	
<b>Nationality</b>	Indian	
<b>Relevant Experience</b>	<ul style="list-style-type: none"> <li>• Energy professional providing required consulting and management skills in energy efficiency &amp; conservation, renewable energy, biomass power, environment management and climate change.</li> <li>• Independently handles micro consulting business in all these areas and has been developing his carrier in this field.</li> <li>• Preparing the Techno Economic Viability reports (TEV)</li> <li>• To carry out lenders independent engineers work (LIE)</li> <li>• Database Management of reports, Analytical method adoption of projects undertaken, using various various analytical tools, statistical analysis of energy related data.</li> <li>• Chief auditor for more than 300 energy audit &amp; implementation assistance assignments in commercial &amp; industrial sectors like commercial buildings, textile, chemical, pharmaceuticals, petro chemicals, foundry, engineering, pulp &amp; paper, water works, food processing, hotel industry etc.</li> <li>• Engaged as Associate consultant, with a number BEE accredited Energy Consultancy Firms, for industrial energy auditing and renewable energy projects. Providing consultancy to Designated Industries on implementation of PAT Scheme of BEE</li> <li>• Assistance in successful expansion / diversification of consultancy services in energy conservation, renewable energy, biomass bagasse cogeneration &amp; climate change</li> <li>• Best BDA award for IREDA for consecutive last 3 years – MITCON team member</li> <li>• Presentation of number of papers in national seminars</li> </ul> <p><b>DISCOM/Demand Side Experience:</b></p> <ul style="list-style-type: none"> <li>✓ Load Research and Analysis (EESL Project) for DISCOM like Chamundeshwari Electricity Supply Ltd, Mysore, Karnataka</li> <li>✓ Reliance Infrastructure Ltd, Maharashtra-Demand Side Management</li> <li>✓ TATA Power Co.- MERC, Maharashtra, DSM Program</li> <li>✓ Bureau Of Energy Efficiency, Ag DSM, Maharashtra</li> <li>✓ Bureau of Energy Efficiency, Ag DSM, Gujarat</li> <li>✓ Bureau of Energy Efficiency, Ag DSM, Andhra Pradesh</li> </ul>	
<b>Employment Record</b>		
1997 – till date	Chief Consultant	MITCON Consultancy & Engineering Services Ltd.
1990 – 1996	Consultant	Yajna Fuel Services

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.
<b>Name of Staff</b>	Paurush Godhar ( <b>Accredited Energy Auditor</b> )
<b>Current Position</b>	Chief Consultant
<b>Years with Firm</b>	1 Year 8 Months
<b>Nationality</b>	Indian
<b>Relevant Experience</b>	
Energy Efficiency and Conservation. Some of the projects / assignments handled includes -	
<ul style="list-style-type: none"> <li>✓ Provided consultancy services for PAT schemes to the DCs of different sectors for periodic review of SEC and action plan to reduce the SEC and achieve targets.</li> <li>✓ Conducted more than 100 detailed energy audit and mandatory energy audit in the range of industries like textiles, iron &amp; steel, electrical distribution company, pharmaceuticals, aluminum, oil industry, power plants, plastic industry, chemical plants, dairy, data centers and commercial buildings etc. in India, Nepal, Philippines, Thailand, Indonesia and Bangladesh. <ul style="list-style-type: none"> <li>○ Energy audit in Textiles Sector – 37</li> <li>○ Energy audit in DISCOM - 1</li> <li>○ Energy audit in Railways – 8</li> <li>○ Energy audit in Iron &amp; Steel sector – 5</li> <li>○ Energy audit in Aluminum sector – 2</li> <li>○ Energy audit in Power Plant/Co-gen – 2</li> <li>○ Energy audit in Pharmaceuticals – 2</li> <li>○ Energy audit in Paper Industries – 1</li> <li>○ Energy audit in Buildings – 25</li> <li>○ Energy audit in Food &amp; beverages industries – 5</li> <li>○ Energy audit in Oil &amp; Gas sector – 15</li> <li>○ Energy audit in Automobile sector – 2</li> <li>○ Energy audit in other industries – 5</li> </ul> </li> <li>✓ Data Verification, analysis and helping Bureau of Energy Efficiency (BEE) in target setting for textile sector under PAT <ul style="list-style-type: none"> <li>○ Verification of data collected from the designated consumers of the textile industry</li> <li>○ Normalization of data collected from textile industry to same units</li> <li>○ Gate-to-Gate analysis of energy consumption of different sectors of textile industry</li> <li>○ Calculation of Specific energy consumption of designated consumers</li> <li>○ Clustering of the collected data according to the gate-to-gate SEC</li> <li>○ Helping BEE in setting up targets for designated consumers according to the Energy Conservation Act, 2001</li> </ul> </li> <li>✓ Development of methodology for baseline energy audits under PAT scheme for textile sector <ul style="list-style-type: none"> <li>○ To develop the methodology for conducting baseline energy audits under PAT scheme</li> <li>○ Preparation of questionnaire for the baseline energy auditors for textile sector</li> <li>○ Preparation of checklist for the verification of baseline audit reports</li> </ul> </li> <li>✓ Indian Textile Supply Chain Energy-GHG-Water Study 2010, India <ul style="list-style-type: none"> <li>○ Tracked carbon footprints in entire supply chain in different sectors like spinning, weaving, garmenting etc.</li> <li>○ Evaluated the compliance for Energy Norm 2012 for textile products</li> <li>○ Identified the scope for reducing energy &amp; water consumption level and thereby carbon footprints in the factories</li> <li>○ Suggested various energy conservation measures to individual firm to achieve standard Energy &amp; Water consumption level and thereby reducing Carbon Footprint</li> <li>○ Mapping the Textile Supply chain for various Products like Garments, Home Furnishing Items &amp; other textile made-ups</li> </ul> </li> <li>✓ Life cycle assessment of viscose dope dyed and piece dyed fibers <ul style="list-style-type: none"> <li>○ Preparation of questionnaire</li> <li>○ Data collection for multiple shades of different fabrics</li> <li>○ Walk through facilities and management interviews</li> <li>○ Energy-Water Inventorization</li> <li>○ Pollution/emission/waste tests</li> <li>○ Impact analysis</li> </ul> </li> </ul>	

<b>Employment Record</b>		
Sept 2017 to till date	Chief Consultant	MITCON Consultancy & Engineering Services Ltd.
May 2010 to August 2017	Junior Scientific Officer	Northern India Textile Research Association, G'bad
June 2009 to May 2010	Site Engineer	Singh Engineering Corp, Mathura UP

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.	
<b>Name of Staff</b>	Vivek Nigam ( <b>Certified Energy Auditor</b> )	
<b>Current Position</b>	Sr. Consultant	
<b>Years with Firm</b>	2 Years	
<b>Nationality</b>	Indian	
<b>Relevant Experience</b>		
<ul style="list-style-type: none"> <li>• Statistical analysis, measurement and energy solution provided in Energy Audit of Thermal Power Plant, Fertilizer, Railway</li> <li>• Implementing quality standards for meeting the set targets within time &amp; cost parameters.</li> <li>• Energy audits to encompass a variety of surveying techniques for an analysis of energy usage within a facility.</li> <li>• Preparing Energy Audit Reports considering analysis in the field of Electrical, Process (Thermal) &amp; Utility system.</li> <li>• Selection of the measuring equipment's on the basis of the application &amp; precession.</li> <li>• Collection &amp; Measurement of the Electrical &amp; Mechanical parameters at various stages throughout the audit.</li> <li>• Performance evaluation of Mechanical/Electrical machines for Energy Efficiency rebate and utility cost savings.</li> <li>• Formation of Project Schedule &amp; preparing progress report at various stages on the basis of actual observation &amp; resource analysis.</li> </ul>		
<b>Major Projects</b>		
<ol style="list-style-type: none"> <li>1. Barauni Refinery, Indian Oil Corporation Ltd, Bihar (Govt. of India Undertaking)</li> <li>2. Petrochemical Complex, GAIL (India) Ltd, Pata, Auraiya, Uttar Pradesh (Govt. of India Undertaking)</li> <li>3. Madras Fertilizer Ltd., Chennai, Tamil Nadu (Govt. of India Undertaking)</li> <li>4. 330 MW (Unit -2), Adani Power Plant, Mundra, Gujarat</li> <li>5. Diesel Locomotive Works, Varanasi, Uttar Pradesh (Govt. of India Undertaking)</li> <li>6. J K Lakshmi Cement, Jhajjar, Uttar Pradesh</li> <li>7. Inland Container Depot, Star Track Terminals Pvt. Ltd., Dadri, Uttar Pradesh.</li> <li>8. 2 x 7.5 MW Independent Power Plant, Buxar (Akask Energy Infrastructure Pvt. Ltd.)</li> <li>9. 26 MW Bagasse Based Cogeneration Plant, Bijapur (Shree Basaveshwar Sugars Ltd.)</li> <li>10. 25 MW &amp; 10 MW Bagasse Based Cogeneration Plant, Mukerian (Indian Sucrose Ltd.)</li> <li>11. 20 MW Bagasse Based Cogeneration Plant, Sangrur (Bhagwanpura Sugar Mills)</li> <li>12. 15 MW Bagasse Based Cogeneration Plant, Neoli (Neoli Sugar Factory)</li> <li>13. Financial Analysis and proposing best possible techno economic feasibility to the customers.</li> <li>14. Establish approvals / consent require for establishment of Biomass Based Power Plant from various departments.</li> <li>15. Managing &amp; Site Coordination in power plants. (Biomass based)</li> <li>16. Preparation of Tenders documents for various packages and coordinating with the vendors for Technical &amp; Financial agreement.</li> <li>17. To coordinate with suppliers in implementations of effective counter measures to uplift the process and efficiency of plant.</li> <li>18. Responsible for project cost estimate &amp; cost control during execution stage to ensure project is completed within cost.</li> <li>19. Financial &amp; Technical review of the Project as Lenders Engineer (IREDA) for project financing organization.</li> </ol>		
✓ Conducting Seminars / Business meet / Customer Interaction.		
<b>Employment Record</b>		
June 2016 to till date	Sr. Consultant	MITCON Consultancy & Engineering Services Ltd.

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.
<b>Name of Staff</b>	Loveneesh Khurana ( <b>Certified Energy Auditor</b> )
<b>Current Position</b>	Sr. Consultant
<b>Years with Firm</b>	2 Years
<b>Nationality</b>	Indian

#### **Relevant Experience**

#### **Demand Side Management And Energy Audit Experience**

- Mandatory Energy Audit Carried out as on date:-**

Sr. No.	DC name	Sector
1	Sportking Synthetics, Ludhiana	Textile
2	Sportking Industries, Bathinda	Textile
3	Ginni International, Neemrana	Textile
4	ST Cottex Exports (P) Limited	Textile
5	SSPL Jamuria	Iron and Steel
6	SSPL Mangalpur	Iron and Steel

- Detailed Energy Audit Carried out as on Date**

Sr. No.	DC name	Assignment Name	City
1	Delhi Electricity Regulatory Commission	Energy Audit of NDMC DISCOM	New Delhi
2	Energy Efficiency Services Limited	Investment Grade Energy Audit for Public Water Works Pumps	Loni (UP), Hapur (UP), Khanna (Punjab), Deoria (UP)

- Member of Team Conducting Energy Audit and submission of Energy Audit Reports for the Following Clients:-

- Club Mahindra.
- Bank of Baroda.
- Textile Units for Sport king, ST Cottex, RK Rayon, Shyam Metallic & Energy Limited (Jamuria/Mangalpur).
- Client Interaction and Management.
- Account Manager for Bank of Baroda Electrical Audit.
- Designated Energy Manager for Textile Plants.
- PAT Cycle –II, Quarterly Production and Energy Review for the Textile Clients.
- Mandatory Energy Audits for Textile Plants.
- Load Research Analysis, J&K.
- EESL Public Water Works Investment Grade Energy Audit.
- Liaison with Nodal Agencies and Participation in Bids.

#### **Independent Thermal Power Projects**

- **Title:** KSK-MPCL 600X6 MW Coal Based Thermal Power Project. **Description:** Involvement in the Finalization of Detailed Project Report, Design Basis Review, Contract Technical specification for Control and Instrumentation part. Defining control design criteria and drive control philosophy for the whole plant
- **Title:** Wardha 135X6 MW Coal Based Thermal Power Project: **Duration:** August'07 to October'10. **Description:** My involvement in the project started right from Making DPR, Contract Technical Specs until the commissioning and synchronization of Unit1&2.
- **Title:** VSLP 135 MW Coal Based Thermal Power Project: **Duration:** August'07 to august'08. **Description:** Checking I/Os and P&IDs before the start of the FAT for the plant DCS, Control design philosophy, Control design criteria.

#### **Captive/ Cogeneration Power Project Experience**

- Techno Economic Evaluation for Cogeneration, Captive power projects and Independent Power Projects.
- Financial Analysis and proposing the best possible techno economic feasibility to the clients.
- Liaison with Nodal Agencies.



- Review Engineering and presenting before standing committee consisting of Joint Secretaries, Ministry of External Affairs, feasibility or non-feasibility of various infrastructures projects under Line of Credit from Government of India,
- Detailed project report preparation including technical aspects, commercial and Financial Aspects.
- Defining various clause for Joint ventures MOU for Dimension - Suncraft JV for Solar Business, Dimension - WAPCOS.  
Fuel Surveys Experience, primarily Biomass surveys; proposing best approach for the Economic fuel Procurement and Supply Chain Management.

**Employment Record**

May 2016 to till date	Sr. Consultant	MITCON Consultancy & Engineering Services Ltd.
Sept 2012 to Aug 2015	Manager(Marketing)	Dimension Engineering Consultants (P) Limited
Aug 2007 to Oct 2010	Project Engineer	KSK Energy Ventures Limited

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.	
<b>Name of Staff</b>	Mohit Saraswat	
<b>Current Position</b>	Chief Consultant	
<b>Years with Firm</b>	3 Years	
<b>Nationality</b>	Indian	
<b>Relevant Experience</b>		
❖ <b>Energy Efficiency &amp; Conservation</b>		
<ul style="list-style-type: none"> <li>• Experience of conducting base line studies, impact assessment studies, demand side management, Load Research Analysis of DISCOM, Baseline, detailed and Mandatory Energy Audits, Electrical and fire safety audits etc.</li> <li>• Preliminary and Detailed Energy Audits and Conservation projects in various industries segments &amp; processes which are as follows: <ul style="list-style-type: none"> <li>✓ Textile – 28 Audits</li> <li>✓ Forging &amp; Foundry – 3 Audits</li> <li>✓ Building, Complexes &amp; Residential – 5 Energy Audits and &gt;250 Electrical Safety Audits (Banks)</li> <li>✓ DISCOM – 4</li> <li>✓ Pharmaceuticals – 7</li> <li>✓ Others – 8</li> </ul> </li> <li>• Experience of providing consultancy services for PAT schemes to the DCs of different sectors for periodic review of SEC and action plan to reduce the SEC and achieve targets.</li> </ul>		
❖ <b>Renewable Energy</b>		
<ul style="list-style-type: none"> <li>• Experience of Lender's Independent Engineer Service Project upto 20 MW Solar Power Plant as Project in Charge.</li> <li>• Experience of Owner's Engineer Service Project upto 50 MW Solar Power Plant as Engineer and Project Coordinator.</li> <li>• Experience of Project Management Consultancy upto 5MW Solar Power Plant as Project In charge and Electrical Engineer.</li> </ul>		
<b>Employment Record</b>		
August 2015 to till date	Chief Consultant	MITCON Consultancy & Engineering Services Limited
June 2015 to August 2015	Contract Based	United Nations Development Programme, New Delhi
June 2014 to August 2015	Contract Based	MITCON Consultancy & Engineering Services Ltd., Pune
April 2012 to March 2014	Contract Based	WAPCOS Limited, Gurgaon
November 2011 to March 2012	Contract Based	MITCON Consultancy & Engineering Services Ltd., Pune

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.	
<b>Name of Staff</b>	Chintan Shah	
<b>Current Position</b>	Project Consultant	
<b>Years with Firm</b>	2 Years	
<b>Nationality</b>	Indian	
<b>Relevant Experience</b>		
Energy team member for various EE based projects / assignments. Some of the projects / assignments handled includes -		
<ul style="list-style-type: none"> <li>✓ Baseline energy audit and Energy Forecast modeling at Asian Paints Ltd, Pune. Functions include Study of Thermal utility (Package boilers and Thermic fluid heater) energy performance and efficiency calculation, Techno economic solutions for efficiency improvement of thermal utility, Air compressor energy performance testing and root cause analysis for efficiency degradation, Process and energy mapping for material charging</li> <li>✓ RLA and energy performance study at Barwani Sugar Mill under Olam Agro Ltd. Functions include measurement of boiler tube thickness and detect possible causes for thickness erosion.</li> <li>✓ Energy performance study for 10 Steel Rerolling mills at UNDP-BEE project at SRRM Bhavnagar cluster. Functions include Steel furnace energy performance calculation (Flue gas analysis, furnace drafting, mass and heat balance, Specific energy consumption calculation)</li> <li>✓ Energy Efficiency and awareness in Ceramic Industries at UNIDO-GEF-BEE project at Thangadh ceramic cluster. Responsibilities include: Conducting Energy Awareness Workshop to Cluster members, conducting comprehensive Energy Audit in 6 ceramic units</li> <li>✓ Mandatory Energy Audit as per BEE guidelines for PAT at 2 cotton spinning units of Vardhman Textiles Ltd. Group.</li> <li>✓ Mandatory Energy Audit as per BEE guidelines for PAT at Shree Rama Newsprint Ltd. Surat</li> <li>✓ Mandatory Energy Audit as per BEE PAT scheme at Bharat Vijay Mills C/o Sintex Ltd. Kalol</li> <li>✓ Promoting Energy Efficiency in Food processing cluster at BEE-GEF Ujjain Food processing cluster. Responsibilities include Conducting Energy audit in 8 different food processing unit in Ujjain, analysis of each energy consuming process and utility, providing solutions for improving energy efficiency.</li> <li>✓ Energy performance assessment of raw water, sewage water, intake well and water distribution pumping systems at 20 sites under Surat Municipal Corporation.</li> <li>✓ Detailed Energy Audit at Torrent Pharmaceuticals Ltd., Dahej Division</li> <li>✓ Detailed Energy Audit at Cadila Healthcare Ltd., Zydus Biologics, Changodar Division</li> <li>✓ Detailed Energy Audit at Alembic Pharmaceuticals Ltd., Karakhadi, Gujarat</li> <li>✓ Detailed Energy Audit at Reliance Industries Ltd., Hazira Complex, A petrochemical Industry</li> <li>✓ Detailed Energy Audit of 5 buildings at Adani Ports and Special Economic Zone, Ltd., Mundra</li> <li>✓ Consultancy services as per BEE PAT Cycle-II to Rankas Texfab Pvt. Ltd., A textile industry.</li> <li>✓ Mandatory Energy Audit of Thermal Power plant 2 x 135 MW of ACB India Ltd., Kasaipali, Korba, Chattisgarh</li> <li>✓ Mandatory Energy Audit of Thermal Power plant 5 x 800 MW Supercritical Thermal power Plant at Coastal Gujarat Power Ltd., Mundra, Gujarat</li> <li>✓ Mandatory Energy Audit of Iron &amp; Steel unit of Mukand Ltd., Kalwe, Thane</li> <li>✓ Detail Energy Audit of 6 pharmaceutical units of Cadila Healthcare Ltd. and preparation of comprehensive energy management system</li> <li>❖ Investment Grade Energy Audit at Gandhidham Nagarpalika 12 pumping stations under EESL MEEP.</li> </ul>		
<b>Employment Record</b>		
July 2016 to till date	Project Consultant	MITCON Consultancy & Engineering Services Ltd.
July 2015 to June 2016	Analyst	Development Environergy Service Ltd.

<b>Name of Firm</b>	MITCON Consultancy & Engineering Services Ltd.
<b>Name of Staff</b>	Mitesh Bhoir
<b>Current Position</b>	Sr. Consultant
<b>Years with Firm</b>	2 Years
<b>Nationality</b>	Indian
<b>Relevant Experience</b>	
Energy audit team member working for various energy audit assignments. Some of the projects / assignments handled includes -	
<ul style="list-style-type: none"> <li>✓ Detailed Energy Audit study and Report preparation for M/s. Micro Turners Unit VI, at Baddi, Himachal Pradesh. Involved work: Preparing energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders.</li> <li>✓ Detailed Energy Audit study and Report preparation for M/s. Poona Forge Pvt. Ltd, at Bhosari and Talawade, Maharashtra. Involved work: Preparing energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit study and Report preparation for M/s. Reydel Automotive India Pvt. Ltd., at Hinjewadi, Pune, Maharashtra. Involved work: Preparing energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Lighting Lux Intensity Audit study and Report preparation for M/s. Lupin limited, at Nagpur, Maharashtra. Involved work: Preparing lux audit project report, assessment of lighting systems, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit and implementation assistance study for M/s. Kalyani Technoforge, Pune, Maharashtra. Involved work: Preparing energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit and implementation assistance study for M/s. Kalyani Thermal Processing Pvt. Ltd, Pune, Maharashtra. Involved work: Preparing energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Mandatory Energy Audit study under PAT scheme of BEE for M/s. JSW Steel (Salav) Ltd, Raigad, Maharashtra. Involved work: Preparing mandatory energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit and implementation assistance study for M/s. Viraj Profiles Ltd (SRM &amp; Fastener Division) Boisar, Maharashtra. Involved work: Preparing energy audit project report, assessment of thermal and electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit study at M/s. Vidya pratishtan's (ASC), Baramati, Maharashtra. Involved work: Preparing energy audit project report, assessment of electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit study at M/s. The Kerala Minerals and Metals Limited. Kerala Involved work: Preparing energy audit project report, assessment of electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit study at M/s. TATA Autocomp GY Batteries Pvt. Ltd. Ranjangaon Involved work: Preparing energy audit project report, assessment of electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.</li> <li>✓ Detailed Energy Audit study at M/s. Makino Auto Industries Pvt. Ltd, Noida Involved work:</li> </ul>	

Preparing energy audit project report, assessment of electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.

✓ Detailed Energy Audit study at M/s. Torrent Pharmaceuticals Limited, Visakhapatnam Involved work: Preparing energy audit project report, assessment of electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.

✓ Detailed Energy Audit study at M/s. Jawahar Shetkari Sahakari Sakhar Karkhana Ltd, Hupari. Involved work: Preparing energy audit project report, assessment of electrical equipment's, verification of various documents related to project, presentations, meetings with lenders etc.

**Employment Record**

May 2016 to till date	Sr. Consultant	MITCON Consultancy & Engineering Services Ltd.
2012 to 2016	Energy consultant	PPS Energy Solutions Pvt. Ltd., Pune