Vedika
Instruments Pvt. Ltd

SHORTFORM CATALOG





- **Temperature Gauges, Instruments & Sensors**
- **Pressure Gauges, Instruments & Sensors**
- **Level Gauges, Instruments & Sensors**
- **BMS & Automation Products**
- **Flow Instruments & Sensors**
- **Gas Detection System, Thermostat**
- **Instrumentation Panel,**
- **Fire Alarm Systems, STP Plant**
- **Installation, Commissioning & Our Services**

ABOUT US

Founded in the year **2017**, We **VIPL Instruments** are occupied in wholesaling and supplying of **Process Measuring Instruments & Sensors, BMS Products, Instrumentation Panel** and much more. These products are available in numerous specifications that meet on our valued clientele. Apart from, our client-centric approach, easy payment option, timely delivery and transparent dealing have assisted us to attain the reputed name in the industry.

Over the years the company has expended its technological base as well as bringing a wide range of products. **VIPL Instruments** has a complete Marketing & after Sales Support with strong infrastructure all over India.

We provide End to End Solution for Instrumentation & Control system. Our company represent standard quality products like Pressure, Temperature, Level, Flow Instruments & Sensors etc along with the BMS Products. Complete Automation solution for process control parameters which include PLC, SCADA, Data Acquisition & Control System.

In the Sales, Application, Service & Marketing division people have years of application experience and are totally capable of helping you determine your best process solution. We have maintained a best product quality with a valuable customer service. We understand the value of repeat business and focus on keeping our customers satisfied.

Our commitment to total quality management in both our products and services is the foundation upon which the pillars of our future business are based. **VIPL** has offered its customers quality and cost-effective equipment's, necessary to meet the changing technology and keeping it up to date with market needs.

Our Products Serve a Wide Variety of Applications, from Pressure, Temperature, Level, Flow, Humidity, Data Logging and many more. We know that performance of OEM's design ultimately depends on the quality and dependability of its components. Our Products meet the exact requirements of the OEM application at the lowest possible cost, giving the complete worth of the Product and Service intended.

VIPL Instruments Directly or indirectly involve in many Industries.

- Automobile Industries.
- Food Industries.
- Pharmaceutical Industries.
- Chemical Industries.
- Steel Industries.
- Sugar Industries.
- Packaging Industries.
- Oil & Gas Plant.
- Power Plant.
- Cement Plant.
- Rubber & Plastic Industries.

Product Range

- **PID/ Programmable Temperature Indicator cum Controller**
- **RTD Pt100/ Pt1000 Sensors**
- **Thermocouple Sensors (J, K, R, S, T, E, N, B type)**
- **Thermowell (Bar stock & Fabricated)**
- **2 way/3 way/ 5-way Valve**
- **Pressure Gauge (Bourdon, Diaphragm & Capsule type)**
- **Temperature Gauge (Bimetallic & Mercury Filled)**
- **Flow Sensors & Transmitter**
- **Humidity/Temperature Sensors & Transmitter**
- **Level switch/Gauges & Transmitter**
- **Head & Panel Mounted Temp. Transmitter**
- **Signal Isolator or Convertor**
- **Pressure & Differential Pressure Transmitter**
- **Building Automation Systems & Equipment**
- **Thyristor Power Regulator**
- **Gas/Intrusion Detection System**
- **Instrumentation Panel**
- **Fire Fighting Systems**
- **Installation, Commissioning & Our Services**

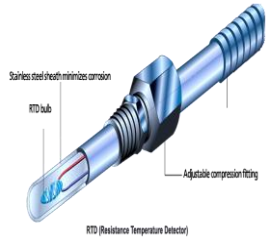
PID/ Process Temperature Controllers

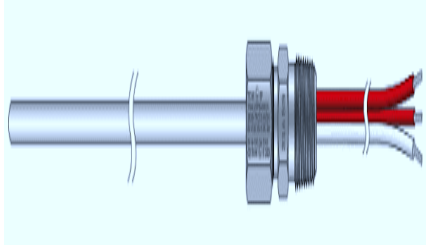
Input: Universal (RTD/Thermocouple/Voltage/Current)
Indication: 4 Digit, 7 Segment RED LED Display
Size: 48mm x 48mm, 96mm x 96mm, 48 mm x 96mm
No. Of Setpoints: Up to 4 setpoints, 4~20 mA (Analog Output) + 4 relays (5A/230VAC)
No. Of Analog Output: Isolated 0/4~20 mA or 0-10 V DC for control / retransmission output
Communication Port/Protocol: RS485 / MODBUS RTU
Supply Voltage: 85~265 V AC SMPS/ 20~35 V DC (Optional)
Auto / Manual selection PID, Proportional and ONOFF control versions
Standard - relay or Analog control output VMD open + close relay output
Transmitter Power Supply: 22 V nominal, 30 mA max.
Relay Logic: (a) Heat (b) Cool, Programmable.

Sensor/Input	Range Limits (°C, EU)		Range Limit in which Accuracy Specified		Accuracy at 30°C	Worst case Accuracy
	Low Scale	High Scale	Low Scale	High Scale	(°C / EU)	(°C / EU)
Input Group 1						
Pt100, 3 wire	-200	850	-200	600	± 0.3	± 1.0
Iron / Constantan (J)	-210	760	0	760	± 1.0	± 3.0
Chromel / Alumel (K)	-270	1372	-50	1200	± 1.0	± 3.0
Pt / Pt-13% Rh (R)	0	1760	400	1760	± 2.0	± 5.0
Pt / Pt-13% Rh (S)	0	1760	400	1760	± 2.0	± 5.0
Copper / Constantan (T)	-270	400	-200	400	± 1.0	± 3.0
Chromel / Constantan (E)	-270	850	0	850	± 1.0	± 3.0
Nicrosil / Nisil (N)	-270	1300	-50	1200	± 1.0	± 3.0
Pt-6%Rh / Pt-30%Rh (B)	400	1820	400	1820	± 3.0	± 5.0
Linear (0-50mV, 0~20mA, 4~20mA	-1999	9999	-1999	9999	± 5.0 EU	± 20.0 EU

RTD Pt100/Pt1000 Sensors

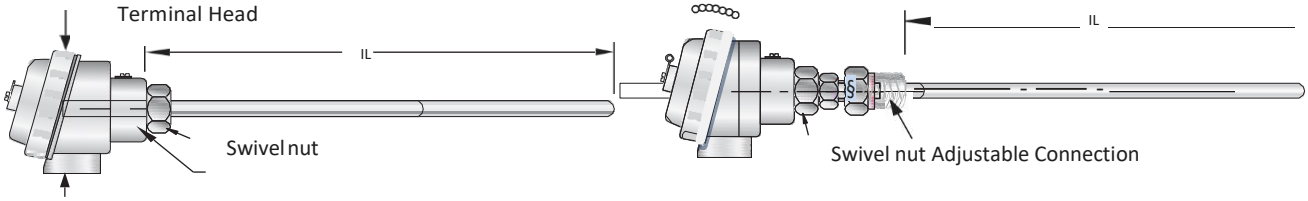
VIPL Instruments Temperature Products line includes platinum and nickel RTDs & temperature sensor ICs. Platinum and Nickel sensors are both resistance temperature detectors with a variety of temperature ranges from -200°C to +1000°C, Nickel has higher resolution within a smaller temperature range. We also offer custom RTDs in both platinum and nickel with user specified values for TCR, nominal resistance, etc. We also have semiconductor temperature sensors that feature highly accurate measurement within a limited temperature range. They are ideal for mobile applications due to their low power consumption. A Resistance Temperature Detector operates on the principle of the change in electrical resistance in wire as a function of temperature.





VIPL Instruments Mineral Insulated RTD sensors are made with compacted magnesium oxide (MgO) that make our sensors durable and vibration resistant. This range of products is widely used in industries like chemicals, food and pharmaceuticals. The measuring element in Mineral Insulated RTD can be designed in several configurations and conforms to the IEC 751 standard for RTD sensors. The sensors are made with weatherproof aluminum heads that protect the inner construction. As per the application, these mineral insulated RTD sensors can be constructed of Pt50, Pt100, Pt200, Pt500 or Pt1000; with 2, 3 or 4 wires single or dual assembly; and in Class A or B. Radix Mineral Insulated RTDs with Terminal Head offer high-utility by virtue of the mineral insulated sheaths which can be very long and bent or coiled as per the application. Choose from standard assemblies, free rotating fittings, hex nipples, round nipple connections, NUN assemblies, adjustable compression fittings, fixed flange connections or adjustable flange connections.

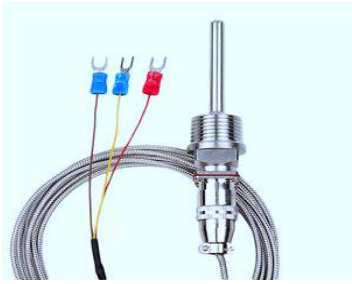
RTD Assembly with Screwed/Flanged Connection
Special Features:
Spring loaded design for positive contact with thermowell
Available in various connections & sheath diameters, Non-bendable sheath
Termination: Aluminum head with threaded cap and chain, Different type of terminal heads
Elements terminated into nickel plated brass terminals mounted on high purity ceramic terminal block
Single/Dual cable entries & cable gland.



Application:
Such assemblies are generally inserted in existing Thermowells/protection tubes
This assembly can be provided with threaded connection and Thermowell

Push Fit type Bearing RTD	RTD Insert with Terminal Block/SS Base	Autoclave Sensors
Special Features: Available in various sheath diameters, Lead wires of your choice Reference Standard: IEC -751/DIN 43760 **Application:** Bearing Temperature measurement used by equipment/instrument manufacturer.	**Special Features:** Mineral insulation enables flexibility and durability. Spring loaded design for positive contact with thermowell Available in various standard sheath diameters and sheath materials, Transmitter output 4-20Ma (Optional), Reference Standard: IEC – 751/DIN 43760 **Application:** Used as a spare or replacement RTD element in existing RTD assembly.	**Special Features:** Designed for the pharmaceutical industry. Eliminates the problem associated with ordinary probes where the pressure cycling the autoclave can force moisture inside the probe.

Acid & Alkalies RTD	Clamp-on RTD	RTD for Automobiles	Sanitary RTD
Special Features: Plastic terminal head, stainless head optional. Titanium Sheath for longer life. Available up to 1000mm. length up to 200°C. Teflon coated SS316 Sheath protects against acids & alkalies	**Special Features:** For Pipe/ Cylindrical surface temperature measurement where welding, drilling, etc. are not possible. Range -20 to 200°C.	**Special Features:** PTFE insulated cable as standard. “O” rings prevent leakage of fluid. -20 to 200°C range. Flexible steel spring ensures easy insertion.	**Special Features:** Used in food, beverages, pharmaceutical and chemical process where contamination & cleanliness are of concern. Tri-clover made of SS316L. Range -20 to 250°C, other ranges are also available.

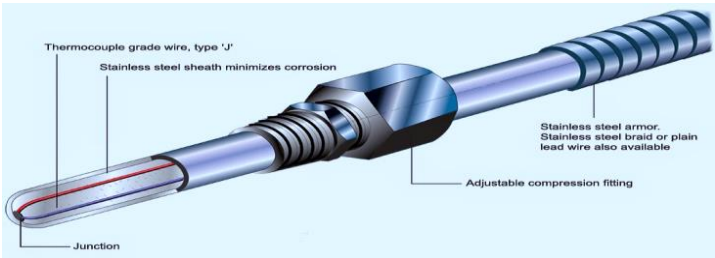


Transition Joint RTD

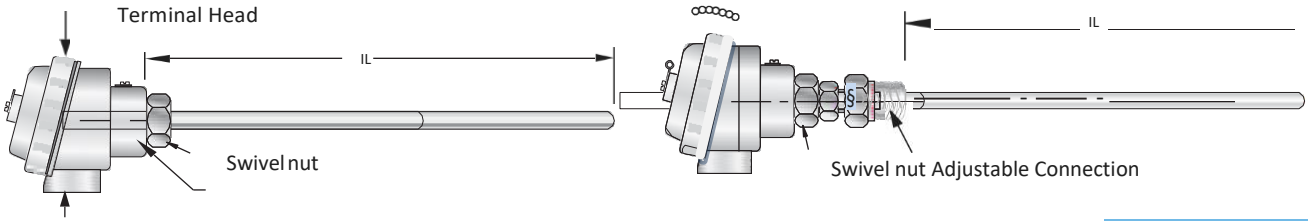
Special Features:
Easy to use model, PTFE insulted and jacketed cables, stainless steel overall braided cables available. Standard models for -20 to 250°C range, other ranges available. SS316 Sheath, SS316L optional. Integral cable makes the assembly light and easy to install. Supplied with 1meter cable or in multiples thereof.
Without Process connection type RTD.
With adjustable compression fitting RTD.
Angular construction is also available.

Thermocouple Sensors

A thermocouple consists of two dissimilar metal wires welded together at one end. When a temperature difference exists between the junction and the open end, an electromotive force (thermal emf) develops and a thermoelectric current flow in the circuit. The emf and its polarity depend on the temperature difference and the combinations of the two metal wires and are not affected by the size or length of the wires. When the relationship between the temperature difference and the thermal emf induced within is known beforehand for a particular thermocouple, temperature can be measured.

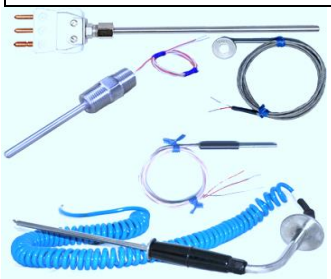


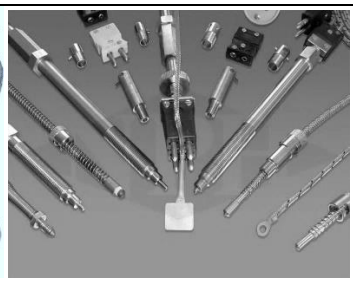
Thermocouples generally trump RTD Sensors for ruggedness, speed of measurement, range of temperature and cost. These thermocouples are fabricated using premium quality raw material and latest techniques in compliance with the international standards. These are widely used in science & industry, temperature measurement for various industrial processes. Clients can avail the offered thermocouples from us at market leading prices. Manufactured as per client's specific requirements, these thermocouples can be availed by clients at affordable prices from us.



Thermocouple Assembly with Screwed/Flanged Connection

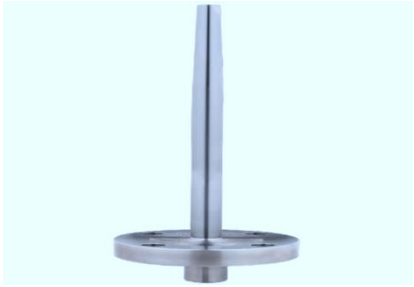
Special Features:
Spring loaded design for positive contact with thermowell
Available in various connections & sheath diameters, Non-bendable sheath
Termination: Aluminum head with threaded cap and chain
Single/Dual cable entries & cable gland.





Thermocouple Probes for Handheld Thermometer	Thermocouple for Automobile	Washer Type Thermocouple	Thermocouple (Acid & Alkali)
Special Features: A variety of thermocouple probes are available for use with handheld thermometers	**Special Features:** Supplied with grounded hot junction, ungrounded (isolated) optional. Bayonet caps & fittings made of plated brass. SS304 caps & fittings available. Standard Sheath MOC SS316.	**Special Features:** Easy to use, Grounded hot junction, PTFE taped cables for 250°C. and glass fibre braided & impregnated for 300°C. applications. J, K and T calibration. Leads terminated into fork type lugs.	**Special Features:** Plastic terminal head, stainless head optional. Titanium Sheath for longer life. Available up to 1000mm. length & up to 400°C. Teflon coated SS316 Sheath protects against acids & alkalies.

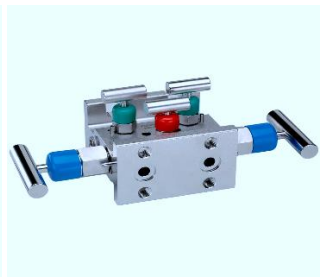
Thermowell (Protection Tube)

Bar Stock Threaded TW	Bar Stock Flanged TW	Fabricated Threaded TW	Socket Weld Bar Stock TW
Features: Design as per PTC 19.3 These Thermowells are manufactured from solid bar stock and installed into the process with the help of threaded process connection. This design is suitable for all type of RTD's, Thermocouples, mechanical as well as digital Temperature Gauges. Available in various shapes like Straight, Straight with reduced tip, partial taper & full taper	**Features:** Design as per PTC 19.3 These Thermowells are manufactured from solid bar stock and installed into the process by using a flanged connection This design is suitable for all type of RTD's, Thermocouples, Mechanical as well as digital thermometers Full penetration welded Available in various shapes like Straight, Straight with reduced tip, partial taper & full taper All type of flanges and flange facings are available as per ANSI / DIN / JIS & BS	**Features:** These thermowells are fabricated from pipe with a welded end cap These thermowells are installed directly into the process with the help of threaded process connection Ideal for use in longer length tank & vessels where bar stock is a limitation	**Features:** Design as per PTC 19.3 These Thermowells are machined from solid bar stock and inserted into the process through direct welded attachment. This design is suitable for all type of RTD's, Thermocouples, mechanical as well as Digital Thermometers available in various shapes like Straight, Straight with reduced tip, Partial taper & full taper and various exotic materials

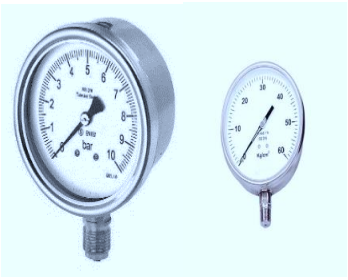
2 Way/ 3 Way/ 5 Way Valve



Needle Valve	2 Way Manifold	3 Way Manifold	5 Way Manifold
Type needle valves with hard seat are designed for use on applications requiring complete isolation or throttling of the media. The conical metal tip (Stem Type CT) press fitted ensures perfect alignment for positive bubble tight shut-off. Available with end connections in sizes from 1/8" to 1" and a wide choice in connections of female screwed, male screwed, male to female screwed or socket weld.	With threaded vertical port inlet and female outlet. The vent/test connection is positioned on the front side. The venting bonnet is positioned on the righthand side and the isolating bonnet on left hand side.	With threaded vertical port inlets and outlets. The isolating bonnets are positioned on the left and righthand side and the equalizing bonnet is positioned on the front. This manifold is specially designed as miniature valve to be remote mounted.	Coplanar Mounting Five Valve Manifold with Drain Plugs. This Manifold Has Two Isolating Valves, One Equalizer Valve & Two Vent Valve. When Assembled to Transmitter Has the Advantage of Compact Size with Easy Operation with Minimum Space. The Direct Mounting Facility to The Base of The Differential Pressure Transmitter Re Salt in Less Lockage Points and More Accurate Measurement. The Model Mainly Suitable for Transmitter. The Manifold Dimensions Illustrated for Standard 54 mm instrument Are Also Available for another Centre on Request Centre.

Pressure Gauges



Bourden Type Pressure Gauge

Special Features
External zero adjustment (optional). Stainless steel case & measuring system Socket directly welded to case Dry and liquid filled version Standard followed EN 837-1 (for NS 100, 150 & 250 mm) CE marking (as per PED 97/23/EC) (for NS 100 mm & 150 mm)

Compact Diaphragm Type Pressure Gauge

Special Features
Stainless steel case & measuring system. Dry or liquid filled Diaphragm seal integrally built with gauge. Reduces the effect of vibration / pulsation Standard followed EN 837-3

Diaphragm Direct Coupled Type Pressure Gauge

Special Features
Robust two-piece design. The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium All SS construction

Diaphragm Sealed Direct Flush Flanged Type Pressure Gauge

Special Features
Welded diaphragm, Easy flushing (through flushing ring) Most suitable for slurry, corrosive & high viscous service Flushing ring, flange & diaphragm are available in various type of SS & exotic materials.

Diaphragm Sealed Heavy Duty Mini Sealed Type Pressure Gauge

Special Features
All AISI 316 SS construction
Light weight, Economical, Ideal choice for high pressure, the diaphragm is welded to the body to ensure separation of the filling fluid from the process medium

Threaded Diaphragm Sealed Pressure Gauge

Special Features
External zero adjustment (optional), Stainless steel case and measuring system, Socket directly welded to case, Dry and liquid filled version, Standard followed EN 837-3(for ns 100, 150), CE marking (as per PED 97/23/EC (for ns 100mm & 150mm), The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium

Diaphragm Flange Insert Pressure Gauge

Special Features:
External zero adjustment(optional) Stainless steel case and measuring system, Socket directly welded to case, Dry and liquid filled version Standard followed EN 837-3(for ns 100, 150), CE marking (as per PED 97/23/EC (for ns 100mm &150mm), The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium

Diaphragm Coupled "I" Section Flanged Pressure Gauge

Special Features:
External zero adjustment(optional) Stainless steel case and measuring system, Socket directly welded to case, Dry and liquid filled version, Standard followed EN 837-3(for ns 100, 150), CE marking (as per PED 97/23/EC (for ns 100mm &150mm), The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium

Diaphragm Sealed Pressure Gauge Sanitary Process Connection
Special Features:
Stainless steel case and measuring system
Measure welded diaphragm
Dry and liquid filled version
diaphragm seal integrally built with gauge
reduce the effect of vibration
polished diaphragm provides best hygiene factor
standard followed EN 837-3
APPLICATION
Especially Design for Sanitary Application
Pharmaceutical
Paint Industry
Bacterial and Fungal Accumulates Which Contaminate the Process Are Eliminated
The Mirror Finishing of Components Assures the Best Hygiene

Pressure Gauges

Capsule Type Pressure Gauge

Special Features:
Stainless steel case & ring
Available ranges: 10 mbar to 1000 mbar
Compact design
Provision for zero adjustment
Standard followed in general EN 837-3

Application:
Low pressure draft measurement
Food & beverages
Pharmaceutical
Breweries
Conventional
Nuclear power plants
Clean air
Gaseous
Low viscous liquid & noncorrosive media that will not obstruct the pressure system.

Contact Type Pressure Gauge

Special Features:
CE Approved electrical contacts
Stainless steel case & measuring system
Standard followed in general EN 837-1

Application:
To control the electrical operation of compressors
Pumps
Motors
Presses
Hydraulic
Pneumatic equipment
Chemicals
Petrochemical plants

Differential Pressure Gauges

Low Pressure Differential Pressure Gauge

DPG is a low cost, diaphragm operated, differential pressure gauge. This can be used in applications for measuring positive, negative, or differential pressure with an accuracy of 2%. Standard applications include monitoring filter status, duct static pressure, room pressure, fan or blower pressure, paint booths, dust collectors, and cabinet purging along with many others.

Single Diaphragm Differential Pressure Gauge	Double Diaphragm Differential Pressure Gauge	Magnehelic Differential Pressure Gauge
Special Features: CE approved electrical contacts Case & measuring system in SS Dry or liquid filled Standard followed in general EN 837 - 3	**Special Features:** CE Case & measuring system in SS Static pressure up to 200 kg/cm² (on request) Dry or liquid filled Accuracy up to 1.6% F. S. Standard followed in general EN 837-3 approved electrical contacts	**Special Features:** Mounts in industry Standard Holes Accuracy 2% Die Cast Aluminium Housing

Temperature Gauges

Bi-Metallic Temperature Gauge

The Temperature is measured with a bimetal system inside the thermometer stem. The bimetal system consists of two metal strips bounded together that have different thermal expansion coefficients. Therefore, one strip will expand faster than the other causing the bimetal strip to curl in proportionate temperature. The bimetal system is helically wound and heat treated for long term stability. Temperature variations cause the bimetal strip to unwind or wind together, which in turn rotates the pointer.

Gas Filled Temperature Gauge

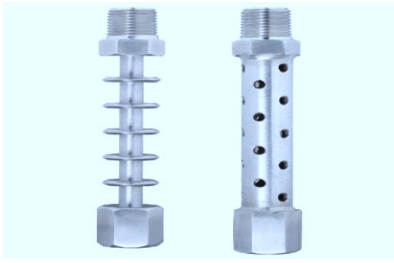
A Gas Expansion Thermometer is made of a cylindrical bulb filled with inert gases & uses the volume expansion of gases at temperature changes. Gas Pressure changes inside the bulb due to temperature changes are sensed by a special helical bourdon tube, which is connected to an amplifying device will give the pointer movement proportional to the temperature. The physical properties used will enable linear reading on the dial from the original to the full scale. When the reading is remote from the sensing point, a capillary is then used for transmission between the bulb and the thermometer head. Capillary armoring is common practice in industrial environments.

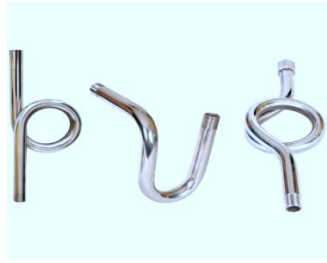
Mercury Filled Temperature Gauge

A Mercury Filled Thermometer is made of a cylindrical bulb filled with mercury & uses the volume expansion of gases at temperature changes. Mercury with Gas Pressure changes inside the bulb due to temperature changes are sensed by a special helical bourdon tube, which is connected to an amplifying device will give the pointer movement proportional to the temperature. The physical properties used will enable linear reading on the dial from the original to the full scale. When the reading is remote from the sensing point, a capillary is then used for transmission between the bulb and the thermometer head. Capillary armoring is common practice in industrial environments.

Bi-Metal Temperature Gauge	Gas Filled Temperature Gauge	Gas Filled with 4 to 20mA output Temperature Gauge	Mercury Filled Temperature Gauge
Special Features Stainless steel case & stem Stem length available from 50 mm Bottom / back / every angle entry Silicon oil filled (optional) With or without thermowell External zero adjustment (optional) Standard followed EN 13190.	**Special Features** CE Approved electrical contacts. Inert gas filled expansion system. Stainless steel case a& stem With or without thermowell Silicon oil filled (optional) Standard followed EN 13190.	**Special Features** CE approved electrical contacts. Inert gas filled expansion system. Stainless steel case & stem With or without thermowell 4 to 20 mA Out Put Standard followed EN 13190.	**Special Features** CE approved electrical contacts. Mercury filled expansion system. Stainless steel case & stem With or without thermowell Silicon oil filled (optional) Standard followed EN 13190.

Gauges Accessories





Gauge Saver	Cooling Tower	Pulsation Dampener	Siphon
Features: Nominal Pressure Up To 400kg/Cm2. 7 Different Adjustable Ranges. Over Pressure Up to 600 kg/Cm2. Below/Diaphragm & Piston Type Model Available	**Features:** Stainless Steel Construction Suitable for Clean Air Gases and Non-crystallized Liquid. Cooling Tower Used Mainly to Protect Pressure Instruments, Gauges, Switches and Transmitters Directly Coming in Contacting with High Temperature Process Fluids or Vaporous Filled in Condensation Fluids.	**Features:** Designed to reduce dampening effect of process fluid Working pressure up to 400 kg/cm 2 Working temperature up to 120°C All stainless-steel construction for corrosive media & environment	**Features:** Pigtail, Coil and “U” type shapes. Maximum temperature up to 400°C. Nominal pressure up to 160 kg/cm². TIG welded & hydro tested Made with seamless pipes

Flow Sensors & Transmitters

Rotameter

"Vedika Instruments" Glass Tube Variable Area Flow Meters (Rotameters) are intended for general in line and By-Pass metering applications (i.e. for Gas & Liquid) where operating conditions are with the limitations of Glass metering tubes. These are the principle of Variable Area. The float moves freely up and down tapered borosilicate glass with fluid flow from bottom to top. The float takes up a position where buoyancy forces and the float weight are balanced in proportion to flow rate. The Vertical position of the float as indicated by scale is the measure of the instantaneous flow rate.

Features:
Measures flow rate
Diverse range
Portable in nature

Applications:
Scientific laboratory
Research centres
Chemical industries

Turbine Flowmeter with Field Mounted Flow Rate Indicator Totalizer ,4-20 mA output Transmitter and Batcher

Vedika Instruments Turbine Flow Meters are useful for liquids & gases in general industrial application. They provide excellent performance with quality & reliability. Suitable for as hygienic application. The flowing media engages a vane rotor causing it to rotate at an angular velocity proportional to flow rate. The pick-up coil senses the spinning motion of the rotor inside the pipe & converts it into a pulsating electrical signal. Summation of the pulsating electrical signal is directly related to the total flow. The frequency is linearly proportional to flow rate.

Electromagnetic Flowmeter with Field Mounted Flow Rate Indicator Totalizer,4-20 mA, Output Transmitter and Batcher (Full Bore Type)

The electromagnetic flow meter accurately measures the flow rate of any conducting liquid or slurry that is flowing in closed pipes. It is obstruction less and hence offers no pressure drop in the process. Absence of moving parts ensures that there is no need for maintenance. The performance of the instrument is not affected by the properties of the material such as corrosiveness, viscosity, density, acidity and alkalinity. It can measure the flow of liquids, pastes and slurries in water, wastewater. Suitable for chemical, fertilizer, paper, dairy, sugar, food and beverage industries.

Humidity with Temperature Sensors & Transmitters

Humidity Transmitters and Sensors are industry standard transmitters with integrated display. Humidity Transmitters come with the option of backlit LCD or 3 Digits x 2 of 7Segment LED Display. Industry standard 4-20mA for humidity & optional temperature output of 4-20mA with option of RS485 Modbus Communication Great accuracy of /-1.8% R.H. for humidity & /-0.5 Deg. C for temperature is achieved using imported basic sensors from Switzerland. The Humidity Transmitter runs on 24 V.D.C. or optionally on 230 V.A.C., Single Phase. Humidity Transmitters also come for Clean Room Enclosures with Stainless Steel Front Plates & 45 mm. Depth enclosures.

Features:
Rugged environmental meter with tripod mount and RS-232 PC interface
Large dual LCD simultaneous display of Temperature and Air Velocity or Relative Humidity
Characters on display reverse direction depending on Hygro-Thermo-Anemometer or Light-Sound Mode
Data Hold, Min/Max, Auto power off, Low Battery/Over range indication
Built-in low friction vane wheel improves accuracy of air velocity in ft/min, MPH, m/s, km/h, and Knots
Built-in precision thin-film capacitance humidity sensor for fast response
Built in thermistor for ambient temperature measurements
Type K input measures temperature to 2372°F (1300°C)
Utilizes precision photo diode and correction filter for Cosine and colour corrected light measurements
Sound Level measurement meets IEC 61672 class 2 using A frequency weighting and fast response time
Complete with Type K thermocouple probe, pouch case, and six 1.5V AAA batteries

Level Switches/ Gauges & Transmitters

Level Switches

Process material: Liquid, Solid – Particle size, Angle of repose, Others – Slurry
Operating Conditions – Operating temperature, Operating Pressure, Density, Specific Gravity, Viscosity, Conductivity
Type of Application – Turbulence, Foam, Vaporization Occur at the Surface Sour or Corrosive Service
Wetted Material (MOC) – CS, SS304, SS316, PP, Teflon, Alloy steel
Additional Processes – Agitation, Foam, Sediments, Heating, Suspension, Others
Area Classification – Weather proof, Explosive, Other

Type of Switches

Side Mounted Float Level Switch
Top Mounted Float & Displacer Level Switch
Cable float Switch
Conductivity Level Switch
Paddle or Fork type Level Switch

Level Gauges

These models consist of Bi-colored magnetic rollers equipped with small rod magnets which are rotated one after another at an angle of 180° by the directed field of the Permanent magnet inside the float. In addition, Level sensing elements can be fixed directly to the float cage, so that simultaneously liquid level is electrically measured through smart transmitter with output of 4-20mA. It is possible to connect Level indicating Meters and Set Point Relays at any distance for control and display purpose. The Magnetic Level transmitters can also be supplied with HART PROTOCOL. Moreover, it is possible to attach bistable Magnetic Switches to the Magnetic Level indicator in order to get switching at any desired liquid level.

Type of Gauges

Tubular level gauge.
Transparent level gauge.
Reflex type level gauge.
Magnetic level indicator.
Float & Board level indicator.

Applications

Low/High pressure Low/High Temperature tanks, Chemical dosing Tanks, Boiler feed water & Cooling tower tanks, Liquid storage tanks, Liquefied gases, Textile dyeing machines, Boiler feed water, Boiler drum level, Interface applications.

Level Transmitters

We are instrumental in providing our esteemed clients with superior quality **Liquid Level Transmitters**. The float cage is flanged to the tank & the level is indicated through a float, which consists of a Permanent magnet. Our Liquid Level Indicators are laterally to be flanged to the tank for communication of level of liquids and liquefied gases in open and closed tanks. These can be used when instruments with high resistance to pressure and temperature are required or if sight glasses or similar indicating parts for reasons of safety cannot be used. This measuring system is preferred because there is a safe pressure and gas tight separation between measuring and indicating parts. We are involved in contact and noncontact type level transmitter for both.

Suitable For

Chemicals
Pharmaceutical industries
Petrochemical industries
Refineries
Oil and fuel tanks etc.

Type of Transmitters

Float Guided Level Transmitter
Capacitance Level Transmitter
Submersible Level Transmitter
Ultrasonic Level Transmitter
Radar Level Transmitter
Diaphragm Pressure Type Level Transmitter

Temperature Transmitters

Vedika Instruments deals in Temperature transmitters like DIN Rail, Head Mounted or Pipe Mounted etc. Transmitters convert low-level input signals from field sensors into a proportional 4 - 20 mA output that is ideal for driving other control instrumentation

Head Mounted Transmitters convert low-level input signals from field sensors into a proportional 4 - 20 mA output that is ideal for driving other control instrumentation.

Features
Inputs: Resistance, thermometers, RTDs, Linear voltage
Input selection: Via HART protocol
Head mount
Response time 500ms
Operating temperature up to 85°C
Mounting Panel or Din Rail
Isolated RS485

Input Type
Thermocouple J, K, R, S, T, E, N, B
RTD 2/3/4 wire, Pt50, Pt100, Pt500, Pt1000, Cu53, Ni100, Ni500, Ni1000
Linear Voltage 0 to 50mV, 0 to 10mV, 0 to 100mV, 0 to 200mV, 0 to 1V, 0 to 5V
Output
4 to 20mA with & without Hart Signal
Transmitter Supply
7.5 to 48VDC

Signal Isolator or Convertor

Features
Input: AC Volts, AC Amps, DC Volts, DC Amps
Outputs: 2 x 0/4~20 mA, 0~1/5/10 V DC
Input/supply/outputs mutually isolated
Accuracy: Class 0.5, Class 0.2
Supply: 85~265 V AC or 18~42 V DC
Supply: 85~265 V AC or 18~42 V DC
RS485, MODBUS RTU option
Fast response output option
Available Inputs
AC Voltage: 0~50 V AC, 0~500 V AC
AC Current: 0~1 A AC, 0~10 A AC
DC Voltage: 0~50 V DC, 0~1000 V DC
DC Current: 0~1 A DC, 0~10 A DC
Analog Output
0~20mA, 4~20mA,
0~2VDC, 0~5VDC, 0~10VDC

Pressure & Differential Pressure Transmitter

Vedika Instruments brings onward, one of the most excellent qualities of Pressure transmitters & Differential Pressure Transmitters. The pressure transmitter & Differential Pressure Transmitters & Digital Pressure Transmitters are used in several applications like- leak testing, flow sensing, level/depth sensing, altitude sensing, pressure sensing etc. we offer these pressure transmitters with an affordable range of price.
Features
Input: AC Volts, AC Amps, DC Volts, DC Amps
Outputs: 2 x 0/4~20 mA, 0~1/5/10 V DC
Input/supply/outputs mutually isolated
Accuracy: Class 0.5, Class 0.2
Supply: 85~265 V AC or 18~42 V DC
Supply: 85~265 V AC or 18~42 V DC
RS485, MODBUS RTU option
Fast response output option
Available Inputs
AC Voltage: 0~50 V AC, 0~500 V AC
AC Current: 0~1 A AC, 0~10 A AC
DC Voltage: 0~50 V DC, 0~1000 V DC
DC Current: 0~1 A DC, 0~10 A DC
Analog Output
0~20mA, 4~20mA,
0~2VDC, 0~5VDC, 0~10VDC

Thyristor Power Regulator

Vedika Instruments brings you a full range of Thyristor (SCR) Power Regulators, which are compact in size, robust in design and easy to maintain. These Power Regulators control power to the resistive or inductive heating loads which can be single-phase, two-phase or three-phase. They can switch load power extremely fast providing the means to respond rapidly to command changes, load changes & power supply changes. This feature allows the control of fast responding loads and eliminates the negative effects of variations in load or supply voltages that can occur with other types of control. Radix power regulators comprise of triggering card, suitably rated back-to-back connected SCR modules mounted on special aluminum-alloy heat sink duly isolated electrically. In a typical application it consist of a controller and sensing element (Temperature sensor connected to heater or job) in loop with a safety controller.

Basics of SCR Power Regulator
Semiconductor power devices
Triggering Card: Control circuit normally referred to as the firing circuit
Heat Sink: Dissipate the heat generated from the semiconductor devices
Protective circuits (fuses and transient suppressors)
Cooling- Natural cool or forced air cool using high speed noiseless air circulating fans
Input and output terminals- Clip-on type heavy duty connectors or copper bus bars
Entire assembly is mounted on sleek and easy to install anodized aluminum enclosure with safety ABS removable covers

Features
CE certified
Operates on phase angle zero cross over technology
15 Amps to 750 Amps current carrying capacity
Single phase / 2 phase / 3 phase versions
Suitable for 3 star without neutral / closed delta configuration
Auto / Manual operation
Accepts (4-20) mA / (0-5) VDC / (0-10) VDC control input
Soft start for smooth control
Adjustable power and current limit
Isolated heat sinks for safety

Gas Detection System

Vedika Instruments is proud to present “Vighnaharta Security™”. Vedika Instruments is providing reliable electronic safety, security, surveillance and automation solutions. After pioneering the concept of Wireless Alert, Shriji has developed several systems that continue to operate in the field for our satisfied customers.

After earning the trust of our clients in the elderly security solutions segment, Vedika Instruments continued to use cutting edge technology to build robust products for commercial and industrial applications. Sharp technical capability is the backbone of our growth. We take pride in our versatile R&D team of young and experienced associates.

Vedika Instruments believes in the idea of “वसुधैव कुटुम्बकम्” (The entire world is one family). Vighnaharta Brand wants to ensure the safety of our community, not only in India but also abroad. Vedika Instruments has embarked on this broader mission by entering markets in India.

VIPL Residential Gas leak detector is designed for detection & early warning for LPG or CNG leakage from cylinders or through pipelines. This wall mounted unit is compact and designed for low cost domestic applications.

VIPL Commercial gas detector is designed for detection & early warning for gas leakage from cylinders or through pipelines. This wall mounted unit is compact and designed for low cost domestic applications as well as commercial applications like hotel kitchens. It can be used in dusty and moist environment. Detectors are available for LP, Hydrogen, Carbon Monoxide & Refrigerant Gases.

VIPL Industrial Gas Detector is designed for detection & early warning for gas leakage from cylinders or through pipelines. Large industries or large hotel kitchens use several gas cylinders or gas banks. There is possibility of gas leakage and the severity of fire / explosion hazard is very high. The TrueSafe ILR is used for safety purpose in hazardous areas where there are chances of gas leakage. This wall mounted unit is designed for permanent installation with replaceable sensor. TrueSafe Industrial Gas Detector is available for Hydrogen, Ammonia, Carbon Monoxide, Sulpher Dioxide, Hydrogen Sulphide, Chlorine, Oxygen, Acetylene, Nitrogen Dioxide, Nitric Oxide, Formaldehyde gases.

Gas Detection System is a sophisticated home / office Gas security system for protection against property damage. The system is designed to detect gas leakage in to building or area with the help of multiple sensors. The system is kept at the user premises. System can read inputs from wired sensors. User can configure various parameters like zone names, date, and time help of key pad. LCD display on the front panel indicates the various activities. LED and buzzers are also used to report emergency.

Fire Alarm & Security System

Vedika Instruments is one of the leading manufacturer & importer of fire fighting equipment in all over 'INDIA' with the brand name of 'Vedika Instruments'. Vedika Instruments is one of the Progressive firm in the field of fire fighting equipment. Company Manufacturing all type of portable and trolley mounted fire extinguishers, Landing valves, Couplings, Nozzles. Hose Reel drums, Fire fighting Chemicals (ABC & DCP type Powder) RRL Hose and many more products. The Firm have professional staff for provide the best solution to the clients. The firm's prime objective is to provide the quality products & services by maintain the high standard of quality, Professionalism and personal relationship with them. We are reliable manufacturer of fire fighting equipment based in Delhi, all our process from raw material to finish product done by well experience person team. We never compromised in our product's quality. Company follow strict quality control method Company works with dealer network to provide easy service and product in all over India. We also Provide our specialized team for installation of all fire fighting systems anywhere in India.

Smoke detector is used to detect fire (which generates smoke). Many types of smoke detectors are in used based on different applications. Most widely used detectors use photoelectric technology. It uses detection of carbon particles present in smoke by using Infrared diodes. When smoke enters the chamber, diode receives more light and the detector gives out alarm signal and also turn ON red led for local indication.

Fire Alarm System: There are two types of panels – Conventional & Addressable. Conventional panels are suitable for small applications like Office, Godown, Store or Small Projects & Addressable panels are suitable for Factories, Industries, Control Rooms, Airport etc. Smoke detectors in a zone (or area) of the building are all connected to the same pair of wires. If any of these detectors report alarm, a single indication is shown on the control panel, means that the exact location of the alarm is not shown but zone area will be indicated on panel.

Fire Suppression System: Fire can have an enormous impact on any institution or company, so to protect from these kinds of incidences, this system can be helpful. This Fire Suppression System (FSS) is specially designed for fire indications, early warnings, and fire suppression facility. The FSS042D is a multi-zone fire suppression panel for single and dual hazard agent releasing applications. The FSS provides reliable fire detection, signaling and protection for commercial, industrial and institutional buildings requiring agent-based releasing.

VIPL Discovery is a range of high specification, analogue addressable fire detectors. Discovery detectors offer reliable detection and false alarm management by a combination of EN54 approved operating modes and sophisticated algorithms. Discovery has a 'distributed intelligence' system where decisions are made in the detector head as well as the control panel. Drift compensation is also incorporated into the detector, allowing it to adapt to dirty or dusty environments which reduces false alarms.

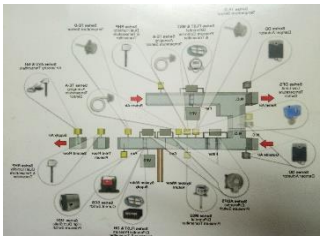
Honeywell Sensors

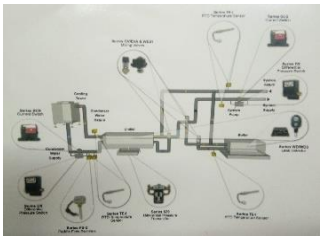
- Beam Detector – Beam Detector use invisible light to scan a defined area.
- Glass Break Sensor – Glass Break Sensor is used for detecting glass vibration and breakage.
- Vibration Sensor – Vibration Sensor recognizes movement or vibration.
- Motion Sensor – Motion Sensor detects the movement of human body automatically in the detection area.
- Shutter Sensor – Shutter Sensor senses automatically the opening of the shutter.
- Door Sensor – Door Sensor able to monitor and detect theft.
- 5D Sensor – 5D Sensor is designed especially for intrusion detection.
- LoRa Sensor – Wireless Door Magnetic Sensor & Wireless Smoke detector based on LoRa technology.
- Intelligent Temperature Sensor – Intelligent Temperature Sensor monitors ambient temperature of room.

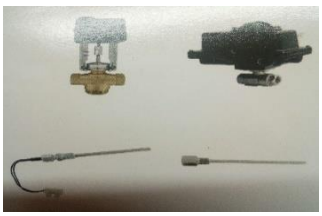
Fire Alarm Panel is a sophisticated home / office security system for protection against burglary or property damage. The system is designed to detect Fire (unauthorized) entry in to building or area with the help of sensors. The system is kept at the user premises. System can read inputs from wired as well as wireless sensors. User can configure various parameters like zones, entry / exit delay, and contact numbers with help of key pad. LCD display on the front panel indicates the various activities. LED and buzzers are also used to report emergency. At the same time system reports to different users by sending SMS or voice call and central stations with the help of CID or SIA DC09 protocol.

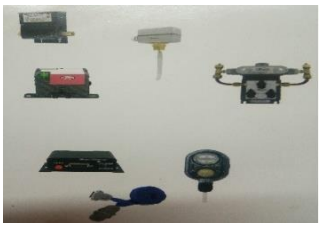
GSM Auto Dialer is used for continuous monitoring and reporting alarm conditions to users. The unit has 4 digital potential free or 12 V DC active inputs. When any input changes its state, alert message is sent to the user by SMS or voice call. For every input, unique separate SMS is sent to reporting numbers. Maximum up to 10 different persons can be notified with the alert. The unit has 2 potential free outputs. The output can be connected to any third-party monitoring systems such as SCADA, PLC and so on. It can also be connected to notification devices such as sounders or sirens. The output can be controlled through SMS by the user.

Building Automation (BMS & EMS)









Vedika Instruments offers PC based control technology, which has already been used successfully for almost decades in all areas of industrial automation, has become an integral component of intelligent building automation. A building management system (BMS), often known as a building automation system (BAS) and EMS often known as environment monitoring system is a computer-based control system installed in building that controls and monitors the building's mechanical and electrical equipment such as ventilation, lighting, power system, fire system & security system. Shriji offers a universal scalable building automation control system covering PC and Ethernet based controllers and modular I/O system for logging all data points in buildings.

Application

Heating & Cooling Application.
Variable Air Volume Application.
Outdoor & Parking Garage Application.
Air Handler Application.

Heating & Cooling Application

1. Water Mixing Valve: Three-way valves are used to mixed return & supply water and chilled and hot water together. Product used Globe with electric actuator or ball valve with electric actuator.
2. Water Temperature monitor: Temperature sensor is inserted into the water pipeline to monitor the system supply, system return, condenser return, and condenser supply and boiler supply water temperature. Product used RTD Temperature sensor with Thermowell.
3. Pump validation/Flow proving: Proving a pump is operating can be done in several ways. Monitor the differential pressure between upstream and downstream of the pump. Product used DP Switch. Monitor the water flow exiting the pump. Product used Flow switch. Monitor the current usage of the pump. Product used Current switch. Ensure proper differential pressure is created from sufficient flow through chiller. Product used DP Transmitter.
4. Leak detection/Drip pan monitor: A conductivity sensor is used to detect leaks of fluid around equipment and valves or to detect full drip pans. Product used Leak detector.

Variable Air Volume Application

1. Air Volume Control: The Amount of air added to the zone is controlled by opening and closing the air duct via a damper with a damper actuator which receives a feedback signal from a differential pressure transmitter. Product used Damper Actuator and DP transmitter.
2. Room Temperature & Carbon Dioxide: The amount of air flow to a zone is varied based on occupancy in a zone. The occupancy is determined by the concentration of carbon dioxide in the zone. Product used Carbon Dioxide and Temperature Transmitter.
3. Room Temperature & Humidity: A wall mounted temperature and humidity transmitter is placed in the zone to monitor the zone conditions and determine demand. Product used Rh+T Transmitter.
4. Water Flow Control: VAV system can include heating coils of hot water that the air flows past. A zone valve is used to change the amount of hot water added to the heating coil. Zone system can include radiant heating system. A zone valve is used to change the amount of hot water added to the radiator in the zone. Product used Zone Valves 1 & 2.
5. Duct supply Temperature: VAV duct temperature sensors measure the supply or discharge air to determine if the reheat coils are needed to condition the air entering the room. Product used RTD.

Outdoor & Parking Garage Application

1. Outdoor humidity/temperature sensors are used for determining how much outside air to bring into the building for economizer application. Product used Humidity/Temperature Transmitters.
2. Outdoor Temperature Sensors for low humidity regions, outdoor temperature is used to determine how much outdoor outside air can be used as free cooling.
3. Excess Gas Exhaust: High gas concentrations of carbon monoxide and nitrogen dioxide from vehicle exhaust are expelled from a parking garage by bringing in fresh outside air through dampers and exhausting the gas saturated air via exhaust fans. Product used Carbon Monoxide & Nitrogen Dioxide Transmitters, Process controller, Damper actuator.
4. Exhaust Fan Validation: Proving an exhaust fan is operating in a parking garage is done by using current switches to monitor the current usage of the fan.

Air Handler Application

1. Dirty Filter Alarm: The differential pressure loss across the filter is monitored. Product used Pressure Switch & DP Transmitter.
2. Fan Validation: Proving a fan is operating can be done in several ways. Monitor the differential pressure between upstream and downstream of the fan. Product used Pressure switch. Monitor the air flow or velocity exiting the fan. Product used Pressure, velocity & DP Transmitters.
3. Duct Static Pressure: A pressure transmitter is used with a static pressure tip or optional inherent static probe to monitor discharge or mixing air duct static pressures. Product used low differential switch and pressure transmitter.
4. Duct Humidity/Temperature Sensor: A humidity/Temperature transmitter is inserted into the duct to monitor the zone discharge Humidity/Temperature. Product used Humidity/Temperature transmitter.
5. Frozen Coil Alarm: A differential pressure loss across the cooling coil indicates ice buildup on the coil. Product used Pressure switch.

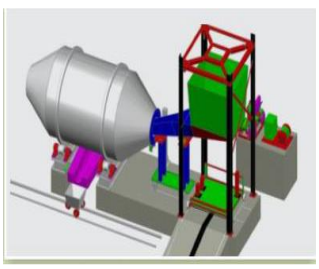
Capillary Type Thermostat

Available on Request:
Smaller stem lengths of 4” (100 mm) & 5" (125mm)
Normally Open Contacts. (N.O.C.)
Preset at fixed temperature.
Higher insulation resistance and H.V. for switchgear and panel boards.
The Vedika Instruments Ex d-Series Temperature Controllers are mechanical 2-point capillary tube type thermostats. The epoxy painted die-cast aluminum enclosure is very robust for harsh environments and can be used for direct connection of heating circuits with approved cable glands. This temperature controller can be used for direct switching by the n/c contact up to 25A. The temperature set point is fully adjustable; the n/c contact opening on temperature rise. Standard color is cream-white RAL 9010 but other color finishes are available upon request.

Technical Data

Min. ambient temperature:	-40°C (-55°C on request)
Switching capacity:	25A/250V (16A/400V on request)
Temperature class:	T6 at +55°C
SJI040Exd:	Temperature Range: 0…+40°C
SJI0200Exd:	Temperature Range: 0…+200°C
SJI50320Exd:	Temperature Range: +50…+350°

Sewage Treatment Plant (STP Plant)



Vedika Instruments Company engaged in providing turnkey solutions for Air & water pollution control and recycling of lead. At the very core, we are a team of young as well as experienced engineers and professionals, united with a common objective of providing comprehensive solutions to our clients for their requirements related to the Air & Water pollution control & like. Our team provides complete package from concept to detailing to manufacturing to installation to commissioning for our clients.

Vedika Instruments has a single vision statement of providing reliable and comprehensive solutions to the clients and in the process grow with the clients to transform itself into an industry leader.

At Vedika Instruments, All equipment are made from best of the material as required for their application and with best of the workmanship. They are designed keeping in view the toughest of operating conditions with the objective of achieving satisfactory performance and long working life. Complete projects are designed inhouse with advanced CAD software, 3D modeling as well as with use of specific design software such as for Fans or Biological Reactors etc.

Solutions to all requirements of clients are prepared keeping the following objectives in Mind

- Cost effective.
- Simple to operate and maintain.
- Result oriented.

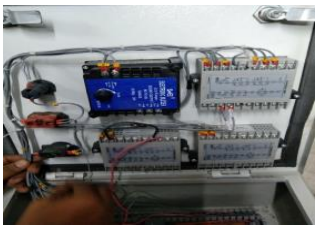
Over the year We have gained experience and insight to support our knowledge. This provides us the edge, as we are able to deliver even on complex problem/Requirements of Clients where other may faulter.

Fields of Operations

Sewage Treatment Plants for

- Hotels/Resorts.
- Hospitals.
- Colleges/Schools.
- Industrial Units.
- Mall/Multiplexes.
- Residential Colonies/Apartments.

Instrumentation Panels



Vedika Instruments Deals with high-quality control panels for a wide variety of applications. Our domain expertise has enabled us to come up with excellent collection of nearly all types of Industrial Panel. Choose from Fiber-Reinforced (FRP) Panels, Annunciator Panels, Purge Panels, Variable Frequency Drive (VFD) Panels, Mimic Panels, Test bench Panels, PLC Panels, Stainless steel Panels suitable for Pharma/ Sanitary industry, Flameproof panels options for hazardous areas and more!. Our Panels enclosures are manufactured using superior-grade raw-material procured from some of the well-known and reliable vendors of the industry. Our products are fabricated under the guidance of experienced professionals to ensure production of defect-free & superior quality range.

Control Panel design starts with the basics and it's not just about selecting a cabinet & back panel to house your electrical control hardware.

Such of basic component of control panel are:

- Cables
- MCB (miniature circuit breaker)
- MCCB (mould case circuit breaker)
- ELCB (earth leakage circuit breaker)
- Incomer
- Selector Switch
- Over Load Relay
- Timer
- Contactor
- Heater Control Panel
- VFD Control Panel
- FLP Instrument Control Panel
- Scanner Control Panel
- PLC Control & Monitoring Panel
- Starter Panel

Our Services

Vedika Instruments is backed by professional experts from diverse background. Entire team is dedicated for complete client satisfaction. We proudly welcome you to the word of Vedika engineering and automation dedicated in engineering and automation sector. We started operation in 2017. With huge experience in fabrication and process automation we have completed couple of big projects.

Under strong leadership and committed professionals our expertise is

Expertise

- Erection and commissioning in C&I and Electrical
- Firefighting system (FDA Systems)
- Consulting for industrial automation and strategies
- Annual maintenance contract
- Shutdown jobs
- Supply of all process control instruments
- Piping Jobs
- Fabrication of different ducts
- Valves repairing and overhauling
- Ash handling plant spares Modification job

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