

NINTH WAVE TECHNOLOGIES

Email ID: ninthwavetechnologies@gmail.com +91-8328674162/9873322555





think BIG. we DO.

www.ninthwavetechnologies.com

Product Range:

- FLOWMETER
- BTU METER
- VAV BOX
- MOTORIZED VALVES
- MANUAL VALVES
- PICB
- DAMPER ACTUATOR
- AIR QUALITY SENSORS
- WATER QUALITY SENSORS
- BMS



About Us

Corporate Profile

Ninth Wave Technologies is a leading Automation company driven with latest and innovative technologies catering to the energy, efficiency, process and automation industries. With world class products and excellent services, Ninth Wave Technologies offers its clients complete integrated solutions across various verticals including HVAC, Power, Pharmaceuticals and Process industries. In order to bring the cutting edge technologies to our customers, Ninth Wave Technologies has tied up with renowned Technology provider companies to provide solutions like BTU meters, Flow meters, Control Valves & Actuator, Water quality analyzer and a whole lot of other instrumentation products on a PAN india basis. We also Cater to our customers with complete turn-key solutions fo BMS and installation.

Ninth Wave Technologies was started with a dream, a dream which turned to reality..Reality in terms of growth of 150%+ every year since the inception. Reality in terms of having more than 800+ satisfied customers, more than 9 branches on PAN India basis and a Team which is dedicated to serve the customer and ensure utmost satisfaction and a great technological solution at minimal cost.

In order to bring the cutting edge technologies to our customers, Ninth Wave Technologies has tied up with renowned overseas companies like Shenitech LLC, USA, Honeywell USA, and Omicron, USA to provide solutions like BTU meters, Flow meters, VAV boxes, Valves, Actuators, Thermostats, Sensors, liquid analyzers and a whole lot of other instrumentation products. We are also actively associated with Honeywell for Building Automation in Building management solutions (BMS) with the WEBS and TRENDS brands.

We as a responsible company take everything concerned with the product seriously: service, support and availability. We take care of our customers not only before sales but after sales support in all phases of application. We believe in long term relationship with our esteemed customers.

Our business practices and processes have combined into a singular philosophy of being trusted partners who provide innovative solutions. It's a philosophy we are proud to live up to.



- Ultrasonic BTU Meter
- Clamp-on BTU Meter
- Portable Ultrasonic Flow Meter
- Electro-Magnetic Flow Meter
- In-line Ultrasonic Flow Meter
- Clamp-on Ultrasonic Flow Meter



- VAV Boxes
- Pressure Reducing Valves
- Manual Ball Valves
- FCU Valves
- Valve Actuators
- Manual & Auto Balancing Valves
- AHU Valves
- Thermostats
- PICB
- Non Return Valves

- Manual Butterfly Valves
- Y Strainer
- Motorized Ball Valves
- Motorized Globe Valves
- Motorized Butterfly Valves
- Damper Actuator (UL & Non UL)
- AHU Thermostats
- Water Flow Switch
- Sensors



- Flow Meter
- Level Transmitter
- Pressure Transmitter
- CO2 Sensors

- CO Sensors
- Temp. Transmitter
- Pressure & Level Switch
- Multifunction Instruments

BMS

- IP Based Solutions
- Remote Monitoring

- Web Based Solutions
- AMC & Services

AMC & SERVICES

- Calibration services for Flowmeters, BTU Meters & VAV Boxes
- Water Audits
- AMC Services

BTU Meter



BTU Meter: Model - 280T

The STUF-280T heat meter offers the most advanced BTU measurement by using state-of-the-art ultrasonic flow measurement technology. It does not have any moving parts that can wear out, thus, literally requires no maintenance. It is also very cost-effective. Both commercial and residential installations can profit from the advantages of this wear-free heat meter with precision, operational security and long service life.

An optional concentrator and data acquisition software make the whole system installation and integration easy. We provide whole system AMR solution as well.

- Proprietary robust sensor design. No reflector, thus, works reliably for any quality of water.
- Inbuilt battery backup Guaranteed for 6 years.
- Completely Tamper proof design
- Wet calibration certificate with each and every meter.
- Modbus/Mbus/BAC net/Pulse output options available
- Very High Flow capacity of +/- 16m/s
- Available for Line sizes of 15mm to 1000m
- CE, ISO, MDI and EN certified meters.



| DN Size (mm) | Flowrate (m [†] /h) | | | Dimension (mm) | | | Weight* | Pipe Joint** (BSP / DIN) | |
|-----------------|---------------------------------|-----|------|-------------------|-----|-----|---------|-----------------------------|---------|
| | Qmin | Qn | Qmax | L | W | Н | (kg) | Sensor | Ext. |
| DN15 | 0.03 | 1.5 | 3 | 110 | 120 | 100 | 1.2 | G3/4B | G1/2B |
| DN20 | 0.05 | 2.5 | 5 | 130 | 120 | 105 | 1.2 | G1B | G3/4B |
| DN25 | 0.07 | 3.5 | 7 | 160 | 120 | 110 | 1.6 | G1 1/4B | G1B |
| DN32 | 0.12 | 6 | 12 | 180 | 120 | 120 | 2.2 | G1 1/2B | G1 1/4B |
| DN40 | 0.2 | 10 | 20 | 200 | 120 | 125 | 2.8 | G2B | G1 1/2B |
| DN50 | 0.6 | 15 | 30 | 200 | 165 | 197 | 10.8 | 4-M16 | |
| DN65 | 1 | 25 | 50 | 200 | 185 | 211 | 14.5 | 4-M16 | |
| DN80 | 1.6 | 40 | 80 | 225 | 200 | 227 | 16.9 | 8-M16 | |
| DN100 | 2.4 | 60 | 120 | 250 | 220 | 247 | 19.9 | 8-M16 | |
| DN125 | 4 | 100 | 200 | 250 | 250 | 242 | 26.2 | 8-M16 | |
| DN150 | 6 | 150 | 300 | 300 | 285 | 277 | 29.0 | 8-M20 | |
| DN200 | 10 | 250 | 500 | 350 | 340 | 327 | 48.9 | 12-M20 | |
| DN250 | 16 | 400 | 800 | 450 | 405 | 412 | 93.9 | 12-M22 | |
| DN300 | 24 | 600 | 1200 | 500 | 460 | 467 | 13.9 | 12-M22 | |

Water Meter: Model - 280W

STUF-280W ultrasonic water meter is the latest innovation from Shenitech. It employs cutting-edge technologies on ultrasonic flow measurement, digital signal processing (DSP) and surface mounting electronics.

- Wear-free, long life-span
- Very low pressure drop
- Wide measurement range
- Available from Line sizes of 15 mm to 1000mm
- Accurate transit-time technology
- Battery supply for 6 or more years



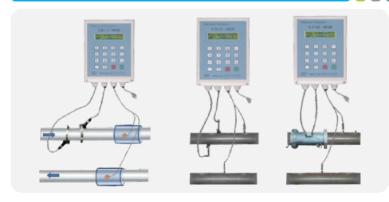


Portable Flow Meter: Model - 300H



- High accuracy measurement
- Non- intrusive, Clamp-on installation, Easy and fast No moving parts, Maintenance free
- Conduct guick and accurate BTU (thermal energy) measurement.
- Light weight, compact design
- Suitable for all commonly used pipe materials and liquids
- Suitable for pipes from 3/4" ~ 240" (DN20~DN6000mm)
- Rechargeable battery for 10 hours of operation
- Built in data logger and flow totalizers
- Self -explanatory user inter face, Easy to operate
- Stuff Manager TM PC software for data download and real time data acquisition
- Signal quality tracking and self adaptation for robust performance
- Connect to BMS or PLC with 4-20mA, OCT pulse or HART output.

Ultrasonic clamp on BTU Meter: Model - 300R1B



The STUF-300R1B system is consisted of the high performance ultrasonic flowmeter STUF-300F1B and a pair of standard PT100 temperature sensors. The ultrasonic flowmeter is based on our cutting-edge clamp-on flow measurement technology, which is capable of measuring the flow from outside of a pipe accurately and reliably. Due to the non-intrusive nature of this technology, there is no pipe cutting, no moving parts, no pressure drop, no leaks and no risk of contamination. In addition, the installation is simple and requires no special skills or tools.

Ultrasonic Flowmeter: Model - ST301



We have a wide range of online ultrasonic flow meters. These flowmeters have \pm 1 % of accuracy of fluid velocity. These flowmeters have three different version i.e. Clamp-on, insertion, flow cell. Clamp on sensors can measure the flow of fluids in the different pipe material, i.e. MS, CS, SS, almost any plastic material etc. Since these sensors are non-intrusive hence they offer no undesirable pressure drop in the process flow. A major advantage with clamp-on is that same flowmeter can be used from 3/4" to 240" line size by just making some changes in the parameters.



Type HS

Small-size pipe transducer with mounting rack & magnet. For pipes DN20 \sim DN100mm (3/4" \sim 4") (0°C \sim 100°C)



Type HM

Medium-size pipe transducer with mounting rack & magnet. For pipes DN50 ~ DN700mm (2" ~ 28") (0°C ~ 100°C)



Type M1

Standard medium-size pipe transducer with magnet. For pipes DN50 ~ DN700mm (2" ~ 28") (0°C ~ 100°C)



Type L1

Standard large-size pipe transducer. For pipes DN300 ~ DN6000mm (11" ~ 240") (0°C ~ 100°C)



Type S1HT

High-temp transducer for small-size pipes. Pipe sizes DN20 ~ Dn100mm Temp $32^{\circ}F \sim 312^{\circ}F$ $(0^{\circ}C \sim 155^{\circ}C)$



Type M1HT

High-temp transducer for medium-size pipes. Pipe sizes DN50 ~ Dn700mm Temp 32°F ~ 312°F (0°C ~ 155°C)

VAV Boxes



Variable Air Volume Boxes (VAV Boxes)



VAV systems are the most modern, energy-efficient systems available for comfort air conditioning. VAV systems require less fan capacity than a comparable constant volume system because VAV systems adjust the air supply to correspond to changes in the air conditioning load within the building. The control of air distribution in VAV systems is accomplished through VAV units which control the amount of supply air to the space in response to the thermostat controlling the temperature of the space. The VAV boxes provided by us is of Pressure Independent type, complete with a microprocessor DDC controller, damper, damper actuator, cross flow velocity sensor with differential pressure transmitter, thermostat and in-built step down transformer.

The air flow sensor is of a cross configuration located at the inlet of the assembly and shall have multiple pickup points, designed to average the flow across the inlet of the assembly. The air flow sensor shall amplify the sensed air flow signal.

The VAV boxes comprise of a microprocessor based BACnet MS/TP DDC controllers, and enable interface for the communication with the third party BACnet based BMS systems.

We can cater to all your requirements right from 200 CFM to 8000CFM

One OEM for Box, Controller & Thermostats

| Unit Size (inch) | L/S Min-Max | CFM Min-Max |
|------------------|-------------|-------------|
| 6 | 29-212 | 62-450 |
| 8 | 52-378 | 110-800 |
| 10 | 85-637 | 180-1350 |
| 12 | 127-991 | 270-2100 |
| 14 | 189-1510 | 400-3200 |
| 16 | 269-1888 | 570-4000 |
| 24 | 378-3775 | 800-8000 |



Features of Honeywell VAV Boxes



- All units are factory calibrated, and tested for the load Variations.
- Single skin as well as Double Skin VAV boxes in customizable options are available.
- Single source responsibility with support for commissioning of VAV Boxes ensuring simplified co-ordination, guaranteed compatibility and hassle- free handing over to the HVAC Contractor.
- ISO 9001-2000 quality certified.
- Heating/ cooling application with single VAV CO2/RH/Temperature inbuilt in one thermostat.
- Flexibility to choose different controllers/ thermostats as per application. Globally backed by the largest installation base
- UL, CE Certified Controllers and Thermostats





Valves & Actuators

AHU Globe Valves and Actuators





- Cast iron or red brass body and stainless steel stem
- Linear or equal percentage characteristics
- Temperature ranges from 2 °C to 170°C
- Size range from 15mm to 150mm
- Used with direct coupled electrical actuators
- Direct coupling with electrical or pneumatic actuators for easy mounting

AHU Ball Type Control Valves and Actuators



- Leakage rate: = 0.01% of Kvs
- Medium: Water or neutral liquid
- Temperature: -5 120°C
- Size (DN15-DN150)

- Connection: Flanged/threaded
- Flow characteristic: Equal percentage
- Nominal Pressure: PN16

Motorised Butterfly Valves



- DI and SS disc variants, IP66/IP67 rated electric actuator, On/Off and Modulating control
- Nominal Pressure: PN16, PN25
- Available sizes: 50 mm, 65 mm, 80 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm, 300 mm, 350 mm, 400 mm, 500 mm, 600 mm

FCU Valves



- On / Off / Modulating
- 110 / 220VAC
- 2-way / 3-way

- DN15, 20, 25
- Spring-return/Non Spring -return
- Nominal Pressure: PN20

PICB Valves



- Size: DN25-DN150
- Flow Control Accuracy: ±5%
- Valve Rated Pressure: PN16
- Media: Water,glycol solution
- Media Temperature: -5° ~120°C
- Operating Ambient Temperature: 0~65°C

Thermostats



- On-Off
- 110 / 220 / 230 VAC
- 2-pipe / 4-pipe

- Backlight LCD
- Heating and Cooling Application
- CE Listed

Commercial Valves



Forged Brass Ball Valve



- Forged brass body, full port design, BSP Internal threads, Chrome plated Brass Ball
- Nominal Pressure: PN16
- **Available Sizes:** 15 mm, 20 mm, 25 mm, 32 mm, 40 mm, 50 mm, 65 mm, 80 mm



Dual Plate Check Valve



- Cast iron / Ductile iron body, DI/SS disc, water and natural liquid application
- Nominal Pressure: PN16, PN25
- **Available Sizes:** 50 mm, 65 mm, 80 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm, 300 mm



Wafer Type Manual Butterfly Valve



- Cast iron / Ductile iron body, DI/SS Disc, water and neutral liquid
- application, EPDM Liner
- Nominal Pressure: PN16, PN25
- Available Sizes: 40mm, 50 mm, 65 mm, 80 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm, 300 mm, 350 mm, 400 mm, 450 mm, 500 mm, 600 mm



Manual & Auto Balancing Valve



- Double regulating balancing valve and shutoff valve
- Nominal Pressure: PN16
- Available Sizes: 15 mm, 20 mm, 25 mm, 32 mm, 40mm, 50 mm, 65 mm, 80 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm, 300 mm



Y-Strainer



- Nominal Pressure: 16 bar
- Available Sizes: 15 mm, 20 mm, 25 mm, 32 mm, 40 mm, 50 mm, 65 mm, 80 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm, 300 mm



Pressure Reducing Valves



- Protection
- Quality
- Flexibility
- Simple to use
- Easy maintenance
- Ready for upgrading
- Minimize noise
- Available Sizes: 15 mm, 20 mm, 25 mm, 32 mm, 40 mm, 50 mm, 65 mm, 80 mm, 100 mm, 150 mm, 200 mm





Fire and Smoke Damper Actuators



Safety First

Spring return rotary type ON/OFF damper actuator for fire and smoke applications with UL555S ratings up to 350°F, running time motor (open) **15 seconds & spring return (close) 15 seconds,** Die-cast aluminum housing, and reversible mounting facilitates.

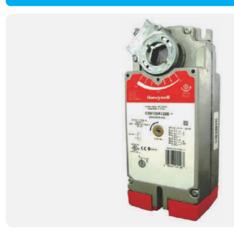
- Fast-Acting two position Actuator
- Running time running time motor (open) 15 seconds & spring return (close)15 seconds (open & close same time)
- For fire and smoke applications meet both UL555 and UL555S ratings up to 350°F
- Robust die-cast Aluminum Housing for protection and long service life
- Internal Spring Stainless Steel
- 2 Built-in Auxiliary switches
- Reversible mounting possible
- Approval UL/cUL; CE; C-Tick

Torque rating 3.4Nm, 9Nm & 20Nm

Fire and Smoke Spring Return Actuators (UL & Non-UL)

| Torque | Model Number | Voltage | SPST Aux Switch | |
|------------------------|--------------|---------|-----------------|--|
| | MS4604F1010 | 230 Vac | 0 | |
| 30 lb-in (3.4 Nm) | MS4604F1210 | 230 Vac | 2 Internal | |
| 30 ID-III (3.4 IVIII) | MS8104F1010 | 24 Vac | 0 | |
| | MS8104F210 | 24 Vac | 2 Internal | |
| | MS4609F1010 | 230 Vac | 0 | |
| 80 lb-in (9 Nm) | MS4609F1210 | 230 Vac | 2 Internal | |
| 00 ID-III (3 INIII) | MS8109F1010 | 24 Vac | 0 | |
| | MS8109F1210 | 24 Vac | 0 | |
| | MS4620F1005 | 230 Vac | 0 | |
| 175 lb-in (20 Nm) | MS4620F1203 | 250 VaC | 2 Internal | |
| 17.5 ID-III (20 INIII) | MS8120F1002 | 24 Vac | 0 | |
| | MS8120F1200 | 27 VaC | 2 Internal | |

Non Spring Return Actuators



- Volume control dampers, mounted directly to the drive shaft or remotely(with the use of accessory hardware)
- Quarter-turn rotary valves, such as ball or butterfly valves mounted directly to the drive shaft

Sensors



CO Sensor & CO2 Transmitter

- Large Coverage Area (optionally available upto 1500 m³)
- Multiple Output Option to select from
- Detachable Display
- CE and UL Listed



Differential Pressure Transmitter

- Multiple Range Selection On Site
- Simultaneous output in Current and Voltage
- Auto Zero Facility

- Unidirectional and Bidirectional Range Selection On Site
- Optional Modbus Communication
- CE and UL Listed
- Removable Display



Temperature and RH Transmitter

- Different Mounting Styles for Different Application
- Capacitive Based Sensor
- Best Humidity and Temp. Accuracy
- Display is detachable

- Optional Communication Protocol Like Modbus, BACnet, etc.
- Available with & without display option
- Replaceable Sensor
- CE and UL Listed



Differential Pressure Switch for Air Media

- Wide DP Range For Selection
- Hassle Free Adjustment Knob
- Frictionless Movement
- Comes with standard accessories for mounting
- High Repeatability
- CE and UL Listed



Cleanroom Instrument

- Available in different combination of measuring Parameter Viz. Humidity, Temperature and Differential Pressure.
- Real Time Clock available optically
- Available in Modus Communication
- Option to choose from internal or external sensor
- Integrated buzzer for Alarm in case of process violation
 - High Accuracy CE and UL Listed



Liquid Analyzers

- pH / ORP Analyzer
- Conductivity Analyzer
- Water Hardness Analyzer
- Chlorine Analyzer
- TDS Analyzer





Building Management System (BMS)

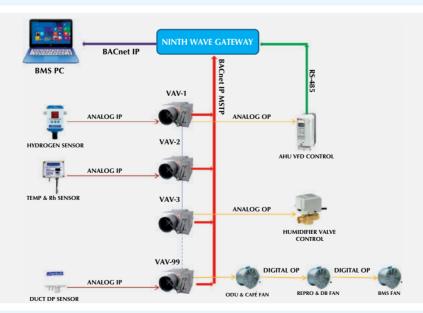
Ninth Wave Technologies was started with a dream of providing complete building automation solutions. Ninth Wave Technologies is a part of Triton group, which is a renowned channel partner of various HVAC related product. We are associated with Honeywell Automation India and their authorized system integrator for its WEBs and Trend range of BMS controllers & field sensors.

We are fully equipped to design, plan & execute building automation projects. Our proposed system schematic & designs are widely approved & accepted by clients & consultants.

Our Technical prowess is always a pillar of strength for our clients to timely complete their time bound projects & has made us their first choice to commission their job timely & flawless.

Features of BMS

- Ninth Wave Technologies provides stand-alone, networked or integrated controls products and solutions in the area of Building Automation & Energy Management.
- We have always believed it is vital to consider both the immediate and long term needs of our clients. This is reflected in our product
 offering which is not only based on the latest technology and covers the widest possible range of applications but also reliable and easy to
 use
- Honeywell Trend BMS system minimize energy consumption and maintain consistently comfortable building conditions through close control and monitoring of Heating, Ventilation, Air Conditioning and other building services.
- Trend provides a range of devices which enables interaction between different communication systems or legacy installations.
- Energy Dashboards within Trend Software provides dynamic view of building's energy performance, allowing building occupants and visitors to see an organization's commitment to improving the management of energy and its energy usage.
- Honeywell WEBS-N4 an affordable integrated open communications building control system. Webs-N4 is a family of state of the art, Web
 enabled building information solutions that provide you with amazing flexibility. The entire system is internet based, so all you need to
 access the system is an Internet Browser.
- Information access via the Web lets you easily connect to your building regardless of where you are in the world the only software you need is your Internet Browser.
- Alarms are prioritized and can be sent via e-mail, phone, PDA and remote printers.



Our Technical prowess is always a pillar of strength for our clients to timely complete their time bound projects & has made us their first choice to commission their job timely & flawless

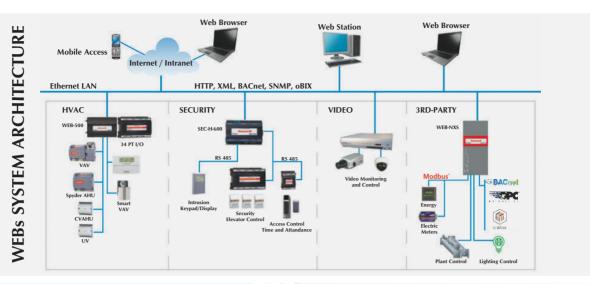
Requirment Gathering Understanding Requirement Designing & Validating System

Planning & Procurement

Project Execution & System Commissioning

Successful Handover





Flow Calibration

We have state of art calibration facility at our head office in Hyderabad. The facility is approved by various agencies to cater to flow meters from ½ inch to 4 inches line sizes.

The entire setup is automated and imported from USA factory to ensure optimum results and perfect accuracy.

Flow Survey

By conducting a professional water audit for your installation, we help make your business or service as water efficient as possible. We employ the latest equipment and highly effective methods to identify equipment or practices that can be modified to reduce water consumption across your facility or premises. With proven expertise in water auditing of distribution networks and water works, our dedicated team works closely with you throughout the auditing process. After zeroing on the problem areas, we assist you in implementing the findings of the water audit which holds the key for water saving for now and in the future.

BTU Meter Calibration

As per the EN standards any billing devices (BTU meters) need to be calibrated once in a year. We as a company specialize in online calibration of BTU meters and their Annual maintenance contracts to ensure maximum uptime and best accuracy at all time. We can calibrate the meters online without any breaking of the pipe of shutting down the flow through the pipe.

We use a highly advanced Portable BTU meter which is Calibrated and electronically paired temperature sensors ensure a high-accuracy temperature differential measurement, especially important in cooling applications. Its patented electronic sensor matching allows an exchange of individual sensors in the field. This will help in reduction of costs in calibration and maintenance over the complete product lifetime.

Each BTU measurement system is individually calibrated using application specific flow and temperature data and is provided with calibration certifications.









Ninth Wave Technologies

401, 4th Floor, Chabra Lake View, B.S. Maktha, Begumpet, Hyderabad - 500 016, INDIA.









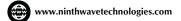


Chandra Prakash Regional Head - South M: +91-8328674162

Ninth Wave Technologies

401, 4th Floor, Chabra Lake View, B.S. Maktha, Begumpet, Hyderabad - 500 016, INDIA.

@ ninthwavetechnologies@gmail.com



Our Products



Branches: Delhi, Bangalore, Chennai, Mumbai, Indore, Pune, Kolkata and Ahmedabad



Mukesh Kumar Regional Head - North M: +91-9873322555

Ninth Wave Technologies

401, 4th Floor, Chabra Lake View, B.S. Maktha, Begumpet, Hyderabad - 500 016, INDIA.

a ninthwavetechnologies@gmail.com

