About Company

V2.3 / 2021-2022

What is (R&D) research company?

Many products produced in different countries, including China and Europe, are the product of inventions and transfer of new technologies of research companies located in technology parks around the world that the main and important members of these companies are sets of very special geniuses who create that technologies and various inventions and their presentation to manufacturing companies of different industries they have contributed a lot to scientific progress and the development of societies.

Our mission and thinking:

The thinking and talent of geniuses belong to the whole world with any religion, belief and ethnicity, and there is no difference between different countries and religions for serving and providing scientific solutions to solve problems and send technology to the whole world on our behalf, and our mission is to serve. It is for the benefit of all societies to humanity through humanitarian inventions and the advancement of technology, so the only red line in our collection will be to enter into military discussions that are inhumane . We also have the opportunity to provide solutions to the fundamental problems of countries &governments in various fields, including all regional problems, rising water levels, global warming, energy supply, water and food crisis, economy and ....

Industries we operate in:

Equipment of Water Electricity Sewage

Equipment of Medical Power

Ministry of Petroleum
Oil & Gas & Petrochemical

Equipment of Mines & Steel
siderurgy& Casting

Industrial of Automation
Instrumentation Control

Home Automation
All kinds of home appliances
Construction automation

Equipment of Telecommunication
Network
Data Transmission

Equipment of Offroad &
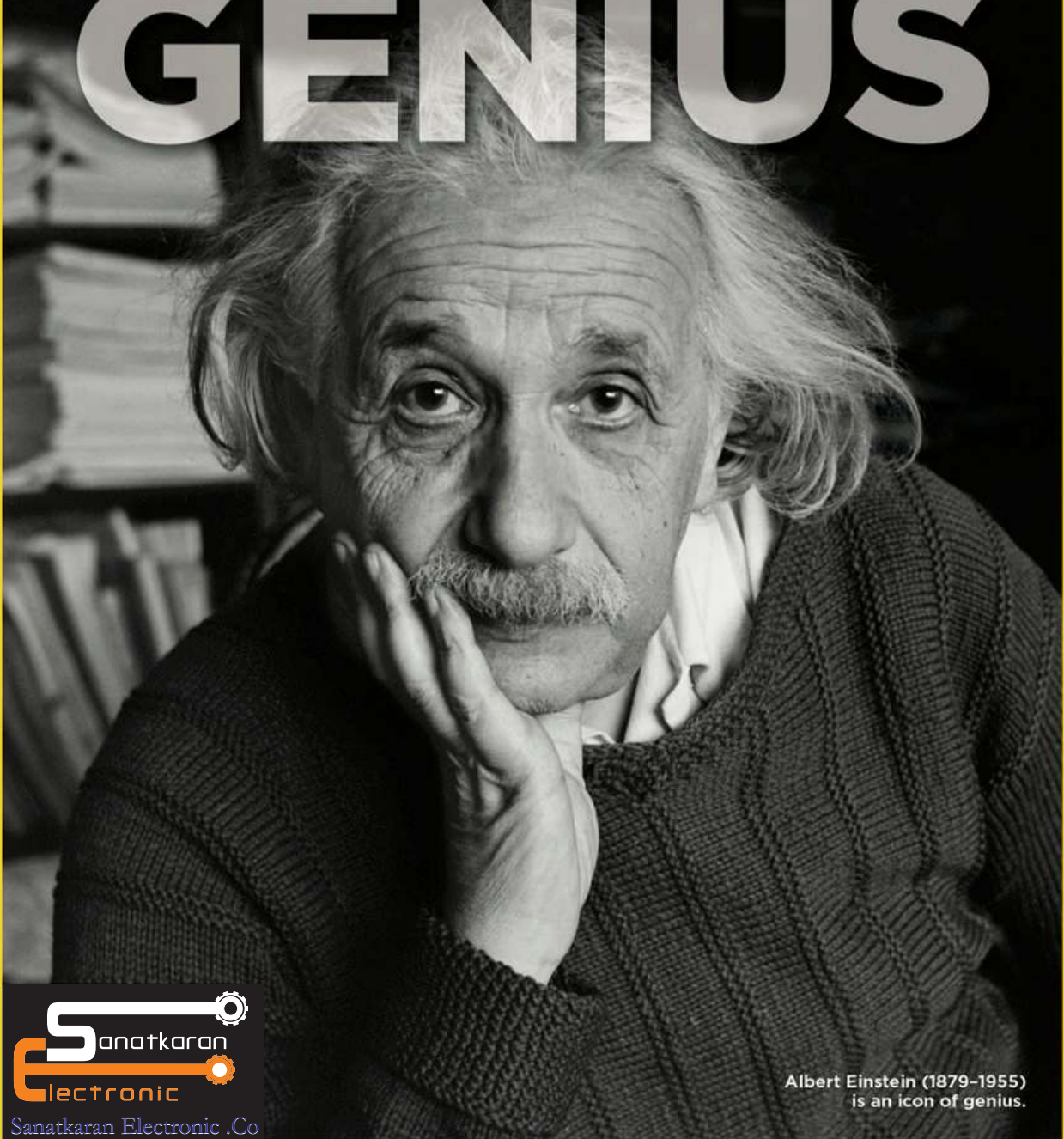Automotive parts

Equipment of Farming
Purification

What is the difference between geniuses people with elite?

A genius is someone who has unique talent and ability to present an exceptional category in the field of mental abilities and creation (creativity) or innovation and very special inventions in works.

The most famous geniuses people we can name are Albert Einstein, Nikola Tesla, Leonardo da Vinci, Stephen Hawking and Edison.

But elites are the chosen ones of a society who, in terms of abilities or capabilities; They are considered superior to the rest of society.

GENIUS

Albert Einstein (1879–1955) is an icon of genius.

About us

With 20 years of experience, we are a research company with the newest technology capabilities, advanced university and laboratory equipment and research with skilled human resources, located in Iran Technology Park, similar to Silicon Valley research companies in the United States that the shareholders and the main members of the company's team have formed a very special set of geniuses and during these years by creating and presenting new technology and inventions; We were able to help manufacturing companies in various industries. In fact, manufacturing companies in various industries, after getting acquainted with our company, prefer to refer their technology needs and investment advice to us, and many universities and scientific authorities use our expertise in their projects .

Why?

Because the creation of an independent research and technology unit requires spending high costs on building infrastructure, purchasing laboratory equipment and attracting elite manpower with high salaries, among other annual running costs, and .... . Therefore, in addition to high costs, a lot of time will be spent to upgrade the product and create new technology and inventions. This waste of time will cause the manufacturing company to lag behind other competitors in global markets due to the rapid development of technology and The risk of investment will increase intensity .

Result:

So, manufacturing companies in various industries, by joining our collection, meet their technology needs and inventions with a little spending a small amount of money and in the shortest time, at the highest level of modern technologies, without risk. Our genius's talent will be with them and as a result, their investment risk will be close to zero .

Sanatkaran
Electronic
Sanatkaran Electronic .Co

Tel: +982176250820-40-44-48
Fax: +982176250834
Email: ehsanbehroozy@msn.com
NO-84 Noavari-8 Technology Park / Tehran / IRAN

www.iransanat.co

About Sanat Karan Electronic Company

Sanat Karan Electronic Company is a Member of Iran's National Elites Foundation. Based in Pardis Technology Park, the company was established in 2004 in Iran, offering research services for the self-sufficiency of the Ministry of Petroleum, Ministry of Energy, and Ministry of Communications concerning their essential equipment. Sanat Karan Co. has so far played a significant role in satisfying the vital needs and self-sufficiency of these ministries by producing essential equipment.

With an investment of over $2 million in Pardis Technology Park, since 2010, the company has been focused on localizing and manufacturing various equipment needed by different organizations based on international standards including zone zero explosion proof standard and quality standards, along with domestic and international licenses. The company's services include production and commissioning of these equipments in Iran. The products have proved their quality over the past five years compared to their international counterparts, even managing to obtain QAN Standard (Quality Assurance Notification) from internationally accredited institutions for the first time in Iran.

Thanks to the research activities carried out by the CEO, in 2011, the company was awarded the title of Top Technology Unit of Pardis Technology Park in the field of Technology Development and Production, and also, in 2010, he was selected as the top inventor and researcher of National Iranian Gas Company.

Achievements:

1. Gold Medal for Iranian Innovators and Inventors Festival
2. Winner of Youth Khwarizmi Awards
3. Over 30 patents in various fields
4. Member of the Society of Innovators and Inventors of Iran

1. Two Honorable Mentions from the Society of Innovators and Inventors of Iran
2. Member of Iran's National Elites Foundation
3. Winner Science-to-Action Festival
4. Top inventor and researcher of National Gas Company (2008)
5. Top Technology Unit of Pardis Technology Park in Technology Development and Production
6. Certificate from Supervisory Body of Petroleum Exports & Domestic Transactions
7. Zero Zone Certificate from IEC International Institutions
8. QAN (Quality Assurance Notification) certification from IEC international institutions

Research Activities and Inventions :

1. Design and manufacture of smart gas meters
2. Design and production of gas volume corrector
3. Design and production of smart gas leak detectors
4. Design and production of smart leak detectors for hydrostatic climate test
5. Design and production of all kinds of instrumentation equipment
6. Design and production of automation and laboratory equipment
7. Design and production of different gas detectors
8. Design and production of industrial monitoring systems
9. Design and production of smart hydrostatic test equipment
10. Design and production of building safety and energy conservation management system
11. Design and construction of multipurpose pigs and robots for oil and gas pipelines
12. Design and manufacture of ultrasonic gas meters
13. Design and manufacture of well-head and water meters
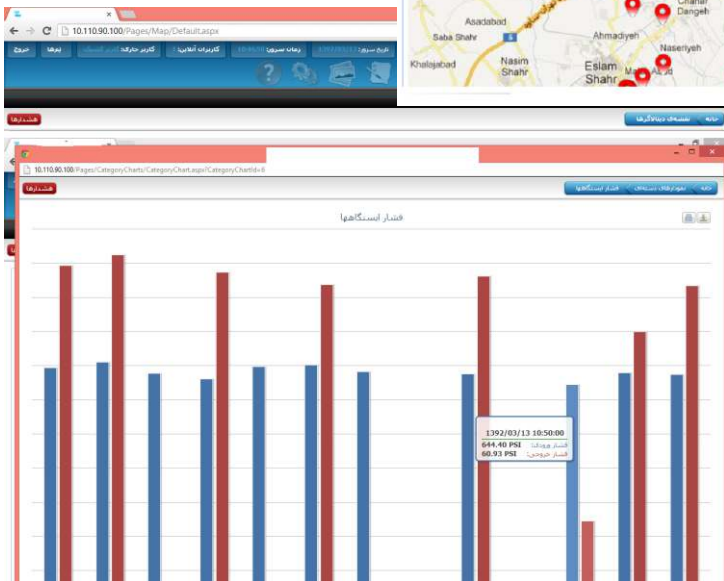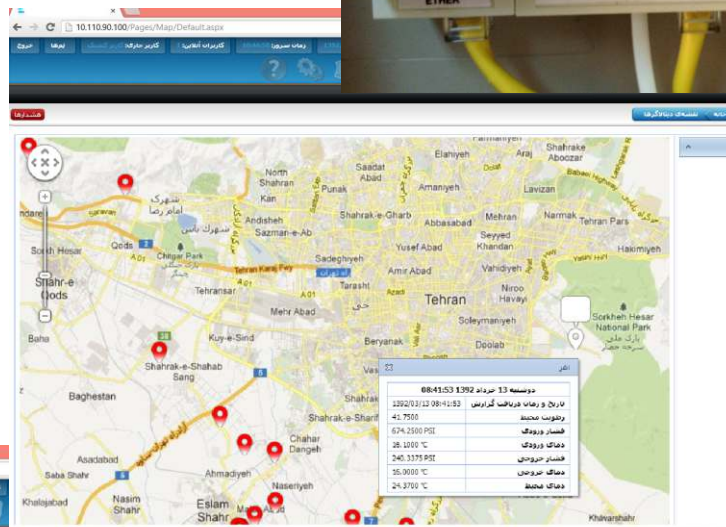
![Sanatkaran Electronic .Co logo]

Sanatkaran Electronic .Co

Sanatkaran Electronic

Inventions & Products in a View

II 1G Ex ia IIC T4

INDUSTRIAL MONITORING & CONTROL SYSTEM

INDUSTRIAL MOBILE (GPRS & GSM & APN)

This system is an explosion-proof industrial mobile phone for industrial environments that has a touch screen for dialing and sending messages. In addition to voice and SMS, secure data transfer from a dedicated secure APN network using highly advanced encryption   .

Technical Information:

Communications = USB & Ethernet

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

Voice transfer with Ability to crypto very special data

Message transfer with Ability to crypto very special data

Data transfer with Ability to crypto very special data

Transfer Data in voice type with crypto very special data

Database Hourly Log For 15 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light & touch panel

Lithium Battery & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

Every unit is dual rated for ATEX and QAN for hazardous location

Ability to crypto data As128 & As256 OR (Customer Request)

Ⓔx II 1G Ex ia IIC T4

INDUSTRIAL MONITORING & CONTROL SYSTEM

This system is able to receive the different data by kinds of sensors from Industrial Station and transfer to Control Center form different Communications . Also this system has the capacity to receive the desired data from the User of Control Center by the mechanical controlling systems connecting with them and control the different parameters of the Station.

Technical Information:

Communications = Rs485-Rs232 & USB & Ethernet & IRDA Infrared & GPRS & GSM & SMS

Standard phone line Modem Support For Transmisson Data

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

WiFi Band FSK Transceiver

IEC104 & OPC Protocol support

Modbus & IDOM Protocol support

Database Hourly Log For 10 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light

Lithium Battery & Solar Cell & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

Hall effect Sensor & Ultrasonic & Leaser Sensor & all Transmitter & Transducer sensor support

Ability to crypto data As128 & As256 OR (Customer Request)

Included Digital & Analog Input - Output Isolation for All Transducer & Transmitter Sensors

ⒺⓍ ᴄᴇ **II 1G Ex ia IIC T4**

New Technology of Industrial Monitoring & Volume Corrector

This system is able to receive the different data by kinds of sensors from Industrial Station and transfer to Control Center through telephone line. Also this system has the capacity to receive the desired data from the User of Control Center by the mechanical controlling systems connecting with them and control the different parameters of the Station.

Technical Information:

Power Supply = External & Operation Internal Battery For 10 Year

Communications = Rs485-Rs232 & USB & Ethernet & IRDA Infrared & GPRS & GSM & SMS

Standard phone line Modem Support For Transmisson Data

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

WiFi Band FSK Transceiver

IEC104 & OPC Protocol support

Modbus & IDOM Protocol support

Database Hourly Log For 10 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light

Lithium Battery & Solar Cell & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

Hall effect Sensor & Ultrasonic & Leaser Sensor & all Transmitter & Transducer sensor support

Ability to crypto data As128 & As256 OR (Customer Request)

Included Digital & Analog Input - Output Isolation for All Transducer & Transmitter Sensors

(Gas detection & Mobile phone & GPS & Walky talky) IN ONE DEVICE

Gas detection for hazardous location

Mobile phone for hazardous location

GPS for hazardous location

Walky talky for hazardous location

▪ ▪

Power supply by rechargeable or disposable batteries

Indusdtrial Micro-processor controlled

Large illuminated LCD display with number symbols for battery

Self-test when switched-on

Easy handling

Visual & 95dba audible alarms & white flashing LED & internal vibrating alarm

Power on & off & select mode with magnetic switch

Automatic calibration for all gas

Sensor operation/measuring range

Calibration on methane:

ppm-sensor, semi-conductor: 0 ... 22000 ppm

Minimum detection sensitivity 1 ppm

%LEL sensor, catalytic combustion: 0 … 100 LEL.%

Minimum detection sensitivity 500 ppm

Vol.% sensor, thermal conductivity: 0 … 100 vol.%

Minimum detection sensitivity 1 vol.%

Typical response times for all gas is 10s to 20s

Technical Information:

Communications = Rs232 & USB & RDA Infrared & GPRS & GSM & SMS

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

WiFi Band FSK Transceiver

Database Hourly Log For 10 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light

Rechargeable Lithium or Polymer Battery & Solar Cell & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

Ability to crypto data As128 & As256 OR (Customer Request)

All Transducer & Transmitter Gas Sensors Support

Model	Gas	Range
Nx1	Flammable gas\smoke	0-10000ppm
Nx2	Natural gas(CH4)	0 - 10000ppm
Nx3	Natural gas(CH4)	0 - 100%LEL
Nx4	Natural gas(CH4)	0 - 100%VOL
Nx73	Natural gas(CH4)(Auto)	0 - 22000ppm 0 - 100%LEL
Nx23	Natural gas(CH4)(Auto)	0 - 10000ppm 0 - 100%LEL
Nx34	Natural gas(CH4)(Auto)	0 - 100%LEL 0 - 100%VOL
Nx234	Natural gas(CH4)(Auto)	0 - 10000ppm 0 - 100%LEL 0 - 100%VOL
Nx5	Carbon Monoxide	0 - 2000ppm
Nx6	Hydrogen	0 - 10000ppm
Nx7	Natural gas(CH4)	0 - 22000ppm
Nx8	Alcohol	0 - 1000ppm
Nx9	Gas(CO)	0 - 2000ppm
Nx10	Gas(O2)	0 - 25% VOL
Nx11	Gas(CL2)	0 - 20PPM
Nx12	Gas(H2S)	0 - 200ppm
Nx13	Gas(CO2)	0 - 10000ppm
Nx14	Gas(O3)	10ppb - 2ppm
Nx15	Gas(NH3)	0 - 3000ppm
Nx16	Benzene	0 - 1000ppm
Nx17	Alcohol	0/05mg/L - 10mg/L
Nx18	LPG Gas	0 - 10000ppm

Industrial Measurement Equipment & Volume Corrector

New Technology of Industrial Monitoring & Flow Computer

II 1G Ex ia IIC T4   En12405

This system is an Industrial Monitoring & volume converter dedicated to commercial & industrial applications

It converts the actual volume measured by the gas meter to reference conditions using the

formula : $Vb=(Pm/Pb)*(Tb/Tm)*(Zb/Zm)*Vm$ OR (Customer Request)

Main formulas available to AGANX19 & S-GERG & AGA8 Table of Z OR (Customer Request)

$0\% < \%Co2 < 30\%$ & $0\% < \%H2 < 10\%$ & $0.55 < SG < 0.9$ & $5.27 < CV(KWH) < 13.33$

Input for contact Platinum PT1000 Temperature sensor class A accuracy (-40 °C...+70 °C)

Input for contact Absolute silicon piezo-resistive pressure sensor (-0.9 to 1000 bar) .

volume input & output :

Input for contact, passive LF & HF reed switch type

Minimum & Maximum frequency 2HZ .... 100000HZ - Programmable input pulse weight

(0.001 , 0.01 , 0.1 , 1 , 10 , 100 m3/pulse) OR (Customer Request)

Digital integrated hardware look for open door & Protected with Password   .

Graphic Display 128 * 64 with backlight

Power supply : Battery operating or external supply mode .

External supply (Minimum 9VDC & Maximum 12VDC) .

Internal battery conditions with Specific 19A.h , 3.6v lithium battery works for 10 years

Autonomy in typical .(Minimum 2.6VDC & Maximum 3.6VDC)

Technical Information:

Communications = Rs485-Rs232 & USB & Ethernet & IRDA Infrared & GPRS & GSM & SMS

Standard phone line Modem Support For Transmisson Data

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

WiFi Band FSK Transceiver

Modbus & IDOM Protocol support

Database Hourly Log For 10 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light

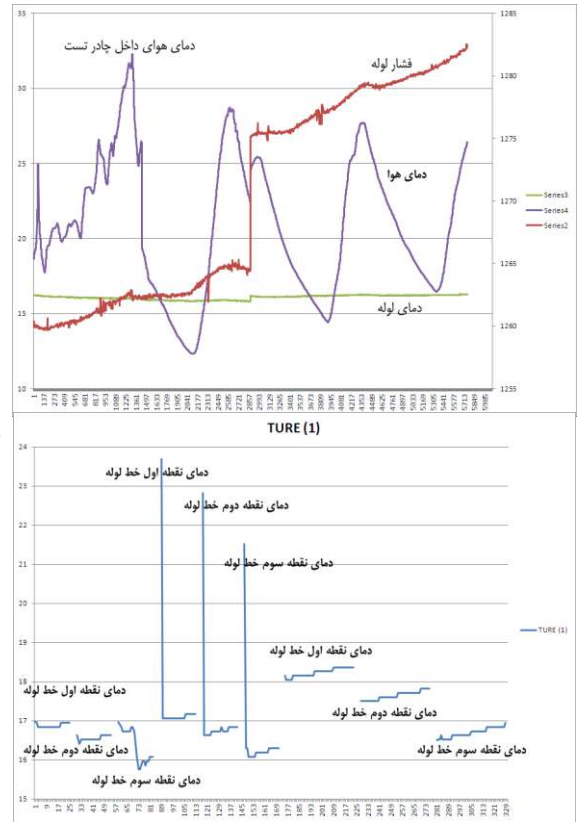Lithium Battery & Solar Cell & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

Hall effect Sensor & Ultrasonic & Leaser Sensor & all Transmitter & Transducer sensor support

Ability to crypto data As128 & As256 OR (Customer Request)

Included Digital & Analog Input - Output Isolation for All Transducer & Transmitter Sensors

Hydrostatic Test System

This device is able to measure the pressure and temperature of various pipes used in oil and gas transmission lines, water, sewage and etc with different sizes. It is also able to measure the temperature of several kilometers of the pipeline in different places and able to display and draw various pressure and temperature graphs in excel environment

Technical Information:

Communications = Rs485-Rs232 & USB & Ethernet & IRDA Infrared

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

Measurement of pressure and temperature

display and draw various pressure and temperature graphs in excel environment

Hight resolutions of pressure and temperature

WiFi Band FSK Transceiver

Database Hourly Log For 15 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light with touch panel

Lithium Battery & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

All Transmitter & Transducer sensor support

Included Digital & Analog Input - Output Isolation for All Transducer & Transmitter Sensors

Measurement Equipment & High-precision System

High-precision measurement system

This product is an exhibitor and multipurpose complex or controller and has controlling ability, showing (displaying) various industrial processes such as temperature, weight, pressure, voltage and current by very high exactness. There are several certain characteristics (features) for this product: diversity of inputs and outputs as well as adequate size and price and also using of optical keys instead of normal ones. So that it can be applied long life in the industrial centers (complex). Also this system is able to accept / receive the various inputs from the different sensors, trans … and bridges and then sample and process it with highly precise up to 24 bits; thus it controls the noted process by its own output which can be as an analog one.

Technical Information:

Communications = Rs485-Rs232 & USB

Modbus & IDOM Protocol support

Database Hourly Log For 10 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Seven segment

Lithium Battery & Solar Cell & Switching Power Supply

Operation Temp -40 TO 80 C & Humidity 95%

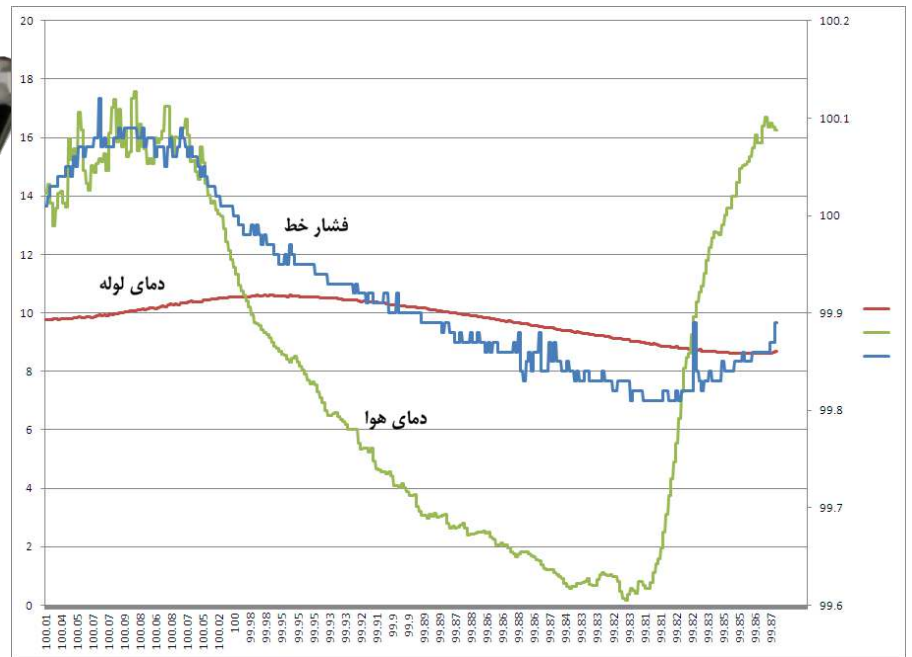Industrial Standard Box for Outdoor With IP68 & Anti UV

Hall effect Sensor & Ultrasonic & Leaser Sensor & all Transmitter & Transducer sensor support

Ability to crypto data As128 & As256 OR (Customer Request)

Included Digital & Analog Input - Output Isolation for All Transducer & Transmitter Sensors

Applications:

- Exhibitors & controllers of temperature

- Industrial meticulous (careful) scales

- Exhibitors & controllers of pressure

- Exhibitors & controllers of metering

- Exhibitors & controllers of ultrasonic sensor

- All Industrial manufacture

- Military applications

فشار خط

دمای لوله

دمای هوا

Data Loger & Test System

This device is able to save the information of sensors and various industrial equipment and display them in the form of excel environment numerically and various graphic charts.

Technical Information:

Communications = Rs485-Rs232 & USB & Ethernet & IRDA Infrared

APN & GPRS & GSM & SMS Modem Support For Transmisson Data

Able to save all types of information from kinds of equipment

display and draw various pressure and temperature graphs in excel environment

Hight resolutions of data

WiFi Band FSK Transceiver

Database Hourly Log For 15 Years

Local standard software (web base) OR (Customer Request)

Industrial Standard Graphic LCD with Back Light with touch panel

Lithium Battery & Switching Power Supply

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

All Transmitter & Transducer sensor support

Included Digital & Analog Input - Output Isolation for All Transducer & Transmitter Sensors

Industrial Pipe Line PIG & Robot

Industrial Pipe Line PIG & Robot

Oil and gas pipeline specialists and inspectors are well aware of the significance of technical know-how for identifying common pipeline damages. Rigorous internal and external inspection of pipes carrying oil, gas, water, or other fluids can reveal their condition and the extent of the damage. The damage incurred by the external coating can be evaluated by an inspection of the outer pipe walls. Smart pigs are now commonly used to detect and assess damages on the interior of oil, gas, and fluid transmission pipes. The smart piece of technology travels along the pipe, measuring the wall thickness, and recording the fluctuations, which helps make the right repair or replacement decisions. No risking in operational disruption, smart pigs are also known as in-line inspection tools.

One way to prevent corrosion damages in fluid transmission pipelines is to rely on pigging for locating and assessing corrosion. Although this operation does not prevent corrosion in and of itself, the information collected by the pigs enables pinpointing the affected areas and the timely maintenance or replacement of the pipe. Pigging was first used as a means for removing the deposits that reduce the line efficiency. Over time, with the advancement of NDT methods, newer pigs came with crack detection and efficiency evaluation capabilities, as well as special features, including working without stopping the flow and high adaptability with various pipe types. As the best—and in many cases only—NDT method for fluid transmission pipeline inspection, pigs are used to carry NDT tools inside the line. Given the volume of fluid transportation in the oil, gas, and petrochemical industries and the necessity of regular inspections of the massive infrastructure, new inspection methods are in high demand. Furthermore, most oil and gas pipelines are laid underwater or underground, which makes using smart pigs even more convenient.

⟨Ex⟩ II 2G Ex d IIC T4

The Bandit is a non-intrusive pig signaler which uses either permanent magnets or active transmitters mounted onto the pig to detect passage from 0.022 to 45.73 mph (0.01m/s to 20 m/s). With thousands of systems have used around the world over the past 15 years, the   pig signaler has developed a strong reputation in the industry for its reliability and durability in even the harshest

Technical Information:

Operational Non-Intrusive   Principle: Sound or Passive Magnetic
Source: Lithium or Alkaline D-Cell Batteries** or 12VDC External Power
Transceiver With Indicator: : WiFi Band FSK Transceiver
Travel Direction: Bi-Directional
Battery Life: One Full Year Minimum
Operation Temp -40 TO 80 C (-20 TO 60 FOR LCD) & Humidity 95%
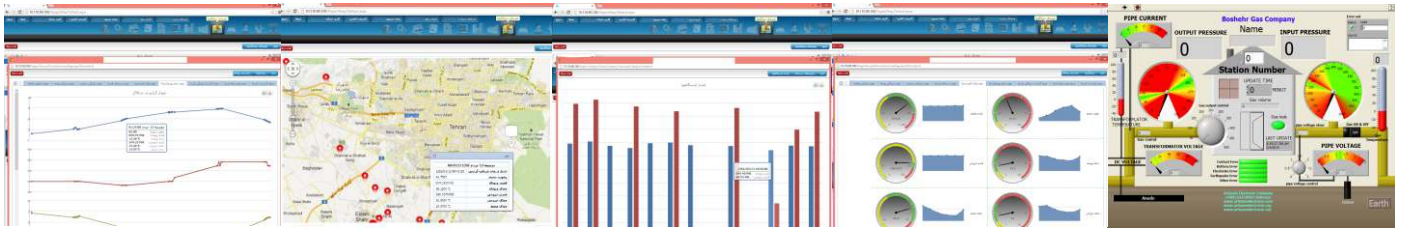Industrial Standard Box for Outdoor With IP68 & Anti UV
CONSTRUCTION
Devices Detected: Sound or Permanent Magnet or Electromagnetic Transmitter
Housing: Aluminum (standard) or optional marine-coated 316L Stainless Steel
Detection Speed: 0.01 meter/sec to 20 meter/sec
Passage Visual Indicator: Hand-hed LCD With WiFi Band FSK Transceiver

OPTIONS
Monitoring Software With APN Communications
Communications = Rs232 & USB & GPS & GPRS & GSM & SMS & APN

Features include:
• Completely non-intrusive to the pipeline
• Designed for direct burial permanent installation
• Every unit is dual rated for ATEX and QAN for hazardous location
• Bi-directional pig detection
• Detection of both transmitter and permanent magnet equipped pipeline pigs
• Automatic retention of the 10 most recent pig passage times and dates
• 4 - 20mA and dry contact relay closure outputs signal pig passages
• Powered for 6-18 months on batteries (depending on battery selection)
• Easily bands to pipelines from 2" to 60"

II 2G Ex d IIC T4

The Bandit is a non-intrusive pig signaler which uses either permanent magnets or active transmitters mounted onto the pig to detect passage from 0.022 to 45.73 mph (0.01m/s to 20 m/s). With thousands of systems have used around the world over the past 15 years, the   pig signaler has developed a strong reputation in the industry for its reliability and durability in even the harshest

Technical Information:

Operational Non-Intrusive   Principle: Magnetic or Radio Electromagnetic
Source: Lithium or Alkaline D-Cell Batteries** or 12VDC External Power
Transceiver With Indicator: : WiFi Band FSK Transceiver
Travel Direction: Bi-Directional
Battery Life: 72 Hours for transmiter & 1 months for Visual Indicator
Operation Temp -40 TO 80 C (-20 TO 60 FOR LCD) & Humidity 95%
Industrial Standard Box for Outdoor With IP68 & Anti UV
CONSTRUCTION
Devices Detected: Magnetic or Radio Electromagnetic Transmitter
Housing: Aluminum (standard) or optional marine-coated 316L Stainless Steel
Detection Speed: 0.01 meter/sec to 20 meter/sec
Passage Visual Indicator: Hand-hed LCD With WiFi Band FSK Transceiver

OPTIONS
Monitoring Software With APN Communications
Communications = Rs232 & USB & GPS & GPRS & GSM & SMS & APN

Features include:
• Completely non-intrusive to the pipeline
• Designed for direct burial permanent installation
• Every unit is dual rated for ATEX and QAN for hazardous location
• Bi-directional pig detection
• Detection of both transmitter and permanent magnet equipped pipeline pigs
• Automatic retention of the 10 most recent pig passage times and dates
• 4 - 20mA and dry contact relay closure outputs signal pig passages
• Powered for 24 - 72 Hours on batteries (depending on battery selection)
• Easily bands to pipelines from 2" to 60"

Energy Management

Energy Management System

Building Safety Management and Energy Consumption Optimization System

With the depletion of energy resources and the phase-out of subsidies, energy costs are rising around the globe, making the optimal energy consumption a must for keeping expenditures in check and preserving resources for future generations. In Iran, the low price of energy before the subsidies were cut, and the lack of awareness have led to overconsumption, which persists to date in many cases, increasing household spending. Further, the irresponsible use of natural gas and electricity, as different forms of energy, exposes the society and individuals to grave hazards. Accordingly, we have designed and developed a system that can monitor natural gas and power consumption in different seasons and notify the residents in case of overconsumption. Further, in the event of a fire, gas or carbon monoxide leak, or power surges, the system alerts the residents and gives visual and verbal instructions on how to resolve the problem. In case the situation aggravates, the system automatically calls emergency services, providing them with the address and establishing phone communication between the first-responders and the person affected so rescue teams can be dispatched to the scene if necessary.

The system was designed to be marketed at a low cost and comes with additional features meeting other household demands, which make it even more attractive.

1: Digital talking clock

2: Visual, talking Persian calendar

3: Digital thermometer

4: Wake-up alarm supporting a weekly schedule

5: Powerful automatic emergency light activating during a power outage

6: Smart nightlight activated automatically during the night

7: Carbon monoxide detector

8: Gas detector

9: Smoke detector

10: Indoor thermometer

11: Ambient light sensor

12: Home electricity usage monitor

13: Speech features

14: Automatic emergency light

15: Modem connection over landline

16: High-output siren

INDUSTRIAL DETECTOR

Gas detection, gas warning, gas concentration measuring instrument for PPM & LEL &VOL% range applications

Modular instrument concept- Basic device without pump (diffusion) or with built-in pump Sensor combinations for diverse applications

Power supply by rechargeable or disposable batteries

Indusdtrial Micro-processor controlled

Large illuminated LCD display with number symbols for battery

Self-test when switched-on

Easy handling

Visual & 95dba audible alarms & white flashing LED & internal vibrating alarm

Power on & off & select mode with magnetic switch
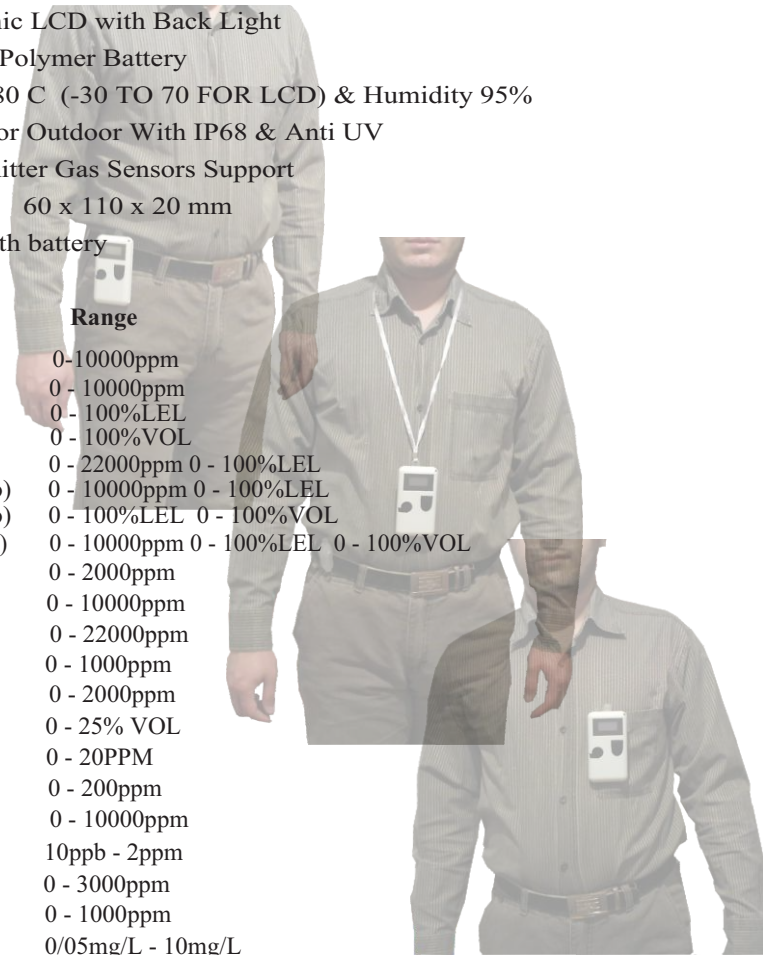
Automatic calibration for all gas

Sensor operation/measuring range

Calibration on methane:

ppm-sensor, semi-conductor: 0 ... 22000 ppm

Minimum detection sensitivity 1 ppm

%LEL sensor, catalytic combustion: 0 … 100 LEL.%

Minimum detection sensitivity 500 ppm

Vol.% sensor, thermal conductivity: 0 … 100 vol.%

Minimum detection sensitivity 1 vol.%

Typical response times for all gas is 10s to 20s

Technical Information:

Communications = USB

Database Hourly Log For 10 Years

Local standard software

Industrial Standard Graphic LCD with Back Light

Rechargeable Lithium or Polymer Battery

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

All Transducer & Transmitter Gas Sensors Support

Dimensions (W x H x D): 60 x 110 x 20 mm

Weight: 90 g & 130 g with battery

Model	Gas	Range
Nx1	Flammable gas\smoke	0-10000ppm
Nx2	Natural gas(CH4)	0 - 10000ppm
Nx3	Natural gas(CH4)	0 - 100%LEL
Nx4	Natural gas(CH4)	0 - 100%VOL
Nx73	Natural gas(CH4)(Auto)	0 - 22000ppm 0 - 100%LEL
Nx23	Natural gas(CH4)(Auto)	0 - 10000ppm 0 - 100%LEL
Nx34	Natural gas(CH4)(Auto)	0 - 100%LEL 0 - 100%VOL
Nx234	Natural gas(CH4)(Auto)	0 - 10000ppm 0 - 100%LEL 0 - 100%VOL
Nx5	Carbon Monoxide	0 - 2000ppm
Nx6	Hydrogen	0 - 10000ppm
Nx7	Natural gas(CH4)	0 - 22000ppm
Nx8	Alcohol	0 - 1000ppm
Nx9	Gas(CO)	0 - 2000ppm
Nx10	Gas(O2)	0 - 25% VOL
Nx11	Gas(CL2)	0 - 20PPM
Nx12	Gas(H2S)	0 - 200ppm
Nx13	Gas(CO2)	0 - 10000ppm
Nx14	Gas(O3)	10ppb - 2pm
Nx15	Gas(NH3)	0 - 3000ppm
Nx16	Benzene	0 - 1000ppm
Nx17	Alcohol	0/05mg/L - 10mg/L
Nx18	LPG Gas	0 - 10000ppm

Intelligent hand-held Gas leak Detector system High resolution and ppm sensitivity with auto ranging

This leak gas detector is one of the smallest and lightest professional instruments for the detection of leaks in the lower ppm range . There is no need for fuel gas as with an FID . To operate it , you just switch it on . The small dimensions and light weight offers big advantages to the operator during a hard working day With the internal rechargeable battery run for more then 23 hours operation time .

The internal pump sucks a sample via probes to the analyze chamber . by the use of one sensor methane is detected at concentrations lower then 1 ppm and without any effect sensitivity to humidity & temp changes

The integrated hydrophobic filter protects the instrument for water ingress and dust and can be easy replaced

Technical information :

Large illuminated lcd Display with number symbols for battery & backlight

Warning notice in the display for required battery change

Communications = USB & IRDA Infrared & GPRS & GSM & SMS & APN

Industrial Standard Box for Outdoor With IP68 & Anti UV

Database Hourly Log For 10 Years

Operational time :   leak detection > 23 hours (without backlight)

Power supply: 4.2 volt adaptor and rechargeable battery pack & 12V external power

Measurement range :   0 to 10000 ppm methane , resolution 1, 10, 50, 100, 1000 ppm

Alarm :   audible and visual signal

Operating temperature: -20 °C ... +50 °C   Humidity 0-95%RH

Storage temperature: -30 °C ... +80 °C   Humidity 0-95%RH

Dimensions (W x H x D): 1200 x 100 x 100 mm

Weight: 1200 g with battery

Intelligent hand-held Gas leak Detector with speaking system High resolution and ppm sensitivity with auto ranging

This leak gas detector is one of the smallest and lightest professional instruments for the detection of leaks in the lower ppm range . There is no need for fuel gas as with an FID . To operate it , you just switch it on . The small dimensions and light weight offers big advantages to the operator during a hard working day With the internal rechargeable battery run for more then 23 hours operation time .

The internal pump sucks a sample via probes to the analyze chamber . by the use of one sensor methane is detected at concentrations lower then 1 ppm and without any effect sensitivity to humidity & temp changes

The integrated hydrophobic filter protects the instrument for water ingress and dust and can be easy replaced

Technical information :

Large illuminated lcd Display with number symbols for battery & backlight

Warning notice in the display for required battery change

Communications = Rs232 & USB & IRDA Infrared & APN & GPRS & GSM & SMS

Industrial Standard Box for Outdoor With IP68 & Anti UV

Database Hourly Log For 15 Years

Operational time :	leak detection > 23 hours (without backlight)
Power supply:	4.2 to 12 volt adaptor and rechargeable battery pack
Measurement range :	0 to 10000 ppm methane , resolution 1, 10, 50, 100, 1000 ppm
Alarm :	audible and visual signal and speaking
speaking system :	speaking measurement number of gas (0 to 1000000 ppm with extender)
Operating temperature:	-20 °C ... +50 °C Humidity 0-95%RH
Storage temperature:	-30 °C ... +80 °C Humidity 0-95%RH
Dimensions (W x H x D):	200 x 150 x 40 mm
Weight:	1000 g with battery

INDUSTRIAL ULTRASONIC WATER LEAK DETECTOR

Generally for testing the gas transition pipes lines, water is injected with high pressure into the pipe and in case of existing any leakage of water in the pipe and if this leakage is very small and tiny, it will not possible to find such leakage with Water Leak Detector so for solving this problem, this system was designed and constructed.

This system has the capacity for finding very small leaks and has high accuracy.

Technical Information:

Communications = Rs232 & USB & GPRS & GSM & SMS

WiFi Band FSK Transceiver

Database Hourly Log For 10 Years

Local standard software

Industrial Standard Graphic LCD with Back Light

Rechargeable Lithium or Polymer Battery

Operation Temp -40 TO 80 C (-30 TO 70 FOR LCD) & Humidity 95%

Industrial Standard Box for Outdoor With IP68 & Anti UV

INDUSTRIAL METER

Ultrasonic flow meters & laboratory loops to simulate flow types

Measurement is integral to instrumentation, and all aspects of instrumentation are intertwined with it. In the meantime, flow meter is one of the most remarkable concepts in measurement and control.
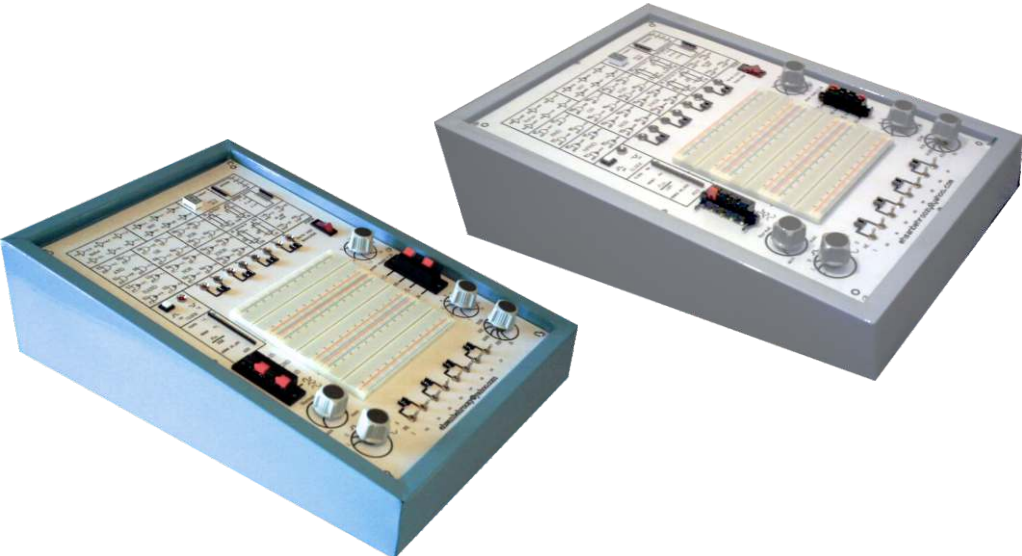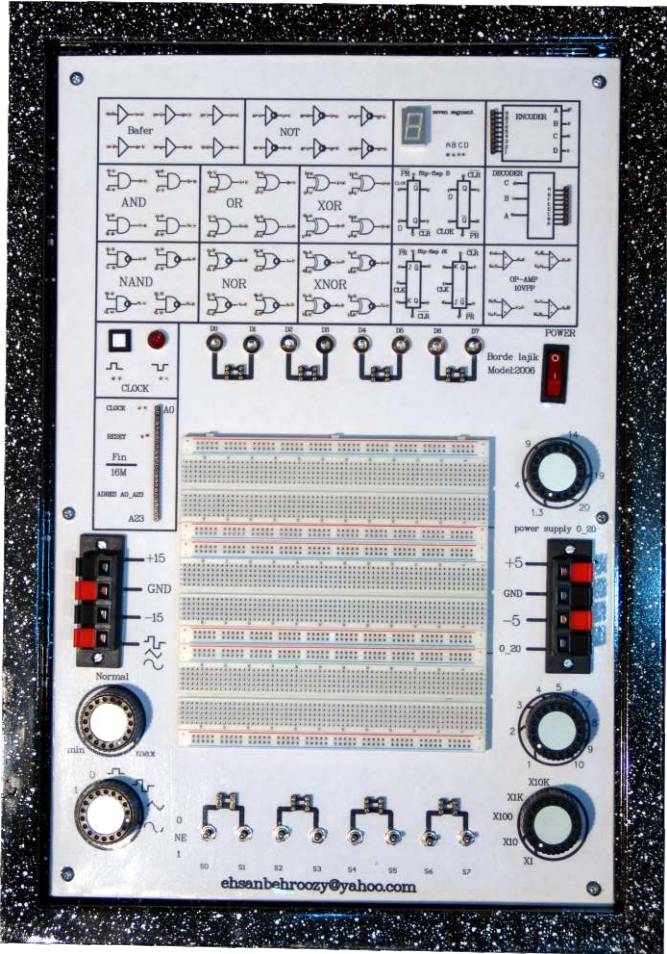
Measurement accuracy is highly significant as regards sales management, for any process or undertaking is carried out considering economics and profits with high precision. The higher of throughput of the instruments, the higher of required accuracy, as even *0.5%* error can inflict massive losses in the long run. That is why *1%* higher accuracy in a device compared to its counterparts can double the price tag. In economics and industrial management, variable costs can be curbed with higher capital costs. Accordingly, investing in more reliable, more accurate measurement systems that may even cost several times more will prove profitable in the long term.

Ultrasonic flow meters are the latest models of the device used in the gas and fluids transmission sector and are rapidly replacing their conventional orifice and turbine counterparts thanks to their unique advantages.

It was proposed that the flow velocity can be calculated based on the time difference between ultrasonic waves transmitted parallel and opposite to the flow direction. Ultrasonic flow meters work based on transmitting signals from one side of the pipe to the other and measuring the time it takes for the signal to cross the pipe widthwise. Being affected by the passing flow, the time the signal takes to cross the pipe can be used to measure the flow velocity. That is, ultrasonic contours measure how long it takes the wave to cut through the flow and use it to calculate the flow velocity.

Completion Laboratory Equipment of University in the one system

Application : Electronic Laboratory

Technical information is in the picture

SCAN ME

Sanatkaran Electronic .Co

Sanatkaran Electronic .Co

Tel: +9821762508 20-40-44-48
Fax: +982176250834
Email: ehsanbehroozy@msn.com
NO-84 Noavari-8 Technology Park / Tehran / IRAN

www.iransanat.co