



Quality Since 1988™
S-KUMAR
M E D I C A L



S-KUMAR Innovation for Life®

QUALITY

DEPENDABILITY

RELIABILITY

Welcome to
S-Kumar India



P. VELUSAMY
Founder / Chairman



SIVAKUMAR VELUSAMY
Managing Director

S-Kumar is an Leading Manufacturer of MEDICAL GAS PIPE LINE ACCESSORIES AND EQUIPMENTS. We are one of the best medical equipment manufacturers. With an experience of 3+ decades. Since 1988 S-Kumar Products Protect, Support & Save lives.

Every inhale is important

S-Kumar - GAS MANAGEMENT SYSTEMS for HOSPITALS



GAS MANAGEMENT SYSTEMS

When it comes to care with medical gases (Q / N O / CO / Compressed air) and vacuums, **S-Kumar** offers a compelling solution for every need. We plan, install, and maintain systems that are not only reliable and perfectly customized to your needs, but that also meet the highest quality and safety standards.

CYLINDER MANIFOLDS

Central gas supply systems for medical gases are supplied worldwide with cylinder manifolds from **S-Kumar**. The modular design allows each **S-Kumar** system to be perfectly customized to individual needs. Subsequent modifications or enhancements can also be easily implemented. Maintenance and repair work can be performed without any service interruption. Reducing and control stations within each gas supply system ensure that the correct gases are available throughout and at all times in sufficient quantity and with the required pressure. **S-Kumar** cylinder manifolds meet ISO 7396-1 standards for medical gases.

VACUUM

A reliable vacuum supply is indispensable in the operating room and intensive care or treatment wards for suctioning fluids and secretions. The vacuum supply system from **S-Kumar** is designed to provide sufficient vacuum pressure, in any working area, always. In addition to systems that are assembled centrally with individual components, **S-Kumar** also offers compact vacuum units with the same comfort and technical standard. Compact units require little space, are easy to monitor, and are operational within just a few moments. All components include state-of-the-art technology and meet all current standards and regulations **S-Kumar** from terminal units to filter units to vacuum pumps.

COMPRESSED AIR SYSTEMS

Regardless of whether you want to secure the supply for a private medical practice or for a university clinic, **S-Kumar** plans, delivers, and installs compressed air systems that meet your specific requirements. **S-Kumar** from the compact unit to the supply enter. The monitoring and control of entire systems is fully automatic. The medical quality of the compressed air is ensured through a five-stage purification unit **S-Kumar** thereby meeting the statutory guidelines of the European Pharmacopia for air quality. Each compressed air system is designed to allow inspection and repair work without interruption of service. The central gas supply is a life-support system and thus a central area within the hospital. The **S-Kumar** Alarm Monitoring System combines unmatched reliability with customized configuration and simplified operation. Each Alarm Monitoring System consists of self-contained components. Their interaction and the configuration software settings allow you to accurately meet the requirements in your hospital **S-Kumar** depending on the number of alarm signals and the desired displays. The modular design allows you to customize the system at any time for changing conditions, e.g. by adding components or changing the configuration of the existing system.

DISTRIBUTION SYSTEMS

For the pipeline system used to distribute medical gases and vacuum pressure to the terminal units, **S-Kumar** uses special high-quality copper piping for medical systems in accordance with ISO 7396-1 and DIN EN 13348. Our technicians install and then test the copper piping using a special soldering process.

AREA CONTROL UNITS

Shut-off valves and pressure monitoring components are installed in so-called Area Control Units for supplying gases to the individual hospital departments. Technical and medical personnel can access all relevant information on the status on the gas supply or shut off areas of the system at any time. Maintenance and repair work can be carried out in the individual areas without impacting the operation of the entire system. If the central gas supply fails to function within specified parameters, the integrated safety system warns department personnel or the hospital's central control room.

TERMINAL UNITS

S-Kumar gas terminal units ensure that medical devices are supplied with medical gases and vacuum pressure from the central gas supply system. Nearly limitless configuration options position the gas terminal units precisely where they are needed to ensure an ergonomic and process-optimized equipment placement. Whether you choose the color-neutral or ISO color system during installation, the gas-specific profiles, an internal and external gas safety device, and gas-specific coding of all relevant components always ensure a distinctive and safe terminal connection.

S-Kumar gas terminal units meet the basic requirements of EN 737, Part 1 for medical devices and vacuums and are in accordance with DIN 13260, Part 2 dimensions.

ANESTHETIC GAS SCAVENGING SYSTEMS

S-Kumar anesthetic gas scavenging system allows an essential reduction of gas concentration, preventing health impairment for the OR-team due to anesthetic gases minimizing the danger of explosion due to a mixture of gases.

AIR MOTOR

The Air motor terminal units and probe are designed for supply and disposal of compressed air required to drive surgical tools. The coupling is suitable for installation in walls, duct systems and ceiling pendants. The **S-Kumar** Air Motor terminal unit conforms to the European standards EN 737, part 1 and DIN NV 737, part 6.

CYLINDER MANIFOLDS

OXYGEN | NITROUS OXIDE | CARBON-DI-OXIDE



S-Kumar Manufacture wide range of Cylinder Manifold both Medical and for Industrial use.

CYLINDER MANIFOLDS are an important element of gas management in hospitals. They ensure the supply with medical gases and control the gas pressure. The core of the system is the Gas Control Station.

MANIFOLD

- ❖ Available in different sizes.
- ❖ Can be manufactured according to customer.
- ❖ High Pressure medical grade Copper Tubes used.
- ❖ Safety and Tested.

CONTROL PANEL BOARD (GAS CONTROL STATION) (GCS)

OXYGEN | NITROUS OXIDE | CARBON-DI-OXIDE

The Gas Control Station (GCS) from **S-Kumar** is a Complete facility system with solutions for various medical gases, flow rates, control and alarm functions and equipment.

Piston type high flow regulator





Highlights:

- ❖ Piston type regulator.
- ❖ High flow rate.
- ❖ GCS Basic with pressure gauge monitoring.
- ❖ Interface to external alarm systems.



TAIL PIPES COPPER | SS BRAIDED

- ❖ Medical grade Copper tubes used.
- ❖ High Strength SS braided Hoses.
- ❖ Safety and Tested.

Medical Compressed Air System



Medical Vacuum System



COPPER TUBES AND FITTING

- ❖ Medical grade.
- ❖ Phosphorous de-oxidized non-harmonic copper tube.
- ❖ As per BS EN 1057-R250 (BS2871:Part1:TableX)
- ❖ Available from 10mm to 108mm.
- ❖ Oil free - decreased.
- ❖ End caps provided.



PLASTIC SADDLES



- ❖ High strength material.
- ❖ Long life.
- ❖ Available in all sizes.

HP TUBING





ISOLATION VALVES

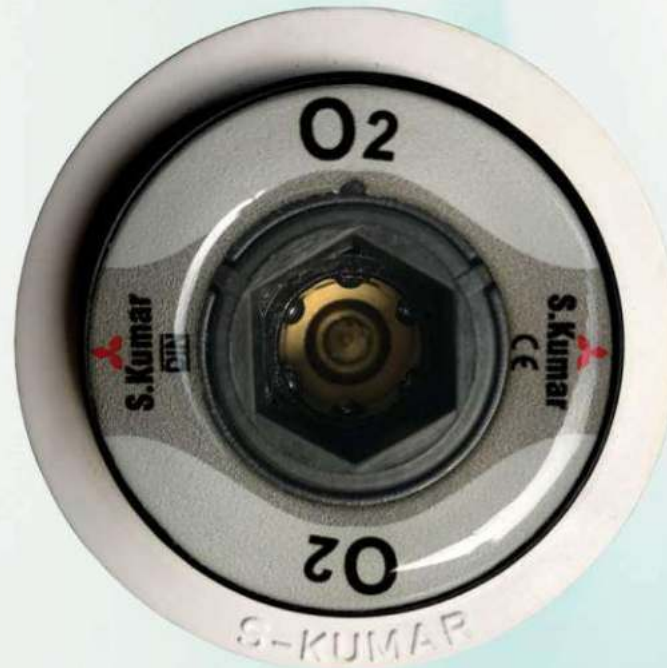
- ❖ Gas application.
- ❖ Brass adaptors.
- ❖ 'O' ring type seal.
- ❖ Easy Installation.



AREA VALVE SERVICE UNIT (AVSU)

- ❖ 2gas | 3gas | 4gas | 5gas | 6gas.
Service available.
- ❖ Easy installation & Maintenance.
- ❖ Good Aesthetic.
- ❖ Open / Concealed available.

MEDICAL GAS TERMINAL UNIT (OUTLET POINT) **DIN (GERMAN STANDARD)**



Terminal units for medical gases according to DIN 13260 - 2

Terminal units - wherever they are required. Exclusive installation opportunities make it possible to position the gas terminal units wherever they are needed, guaranteeing an ergonomic arrangement of equipment and full filling smooth work-flow requirements.

TECHNICAL DATA

The S-Kumar terminal units complying with DIN EN ISO 9170, part 1 and DIN 13260, part 2 are available for the following gases:

Oxygen	O ₂
Medical Air	Air
Nitrous Oxide	N ₂ O
Carbon Dioxide	CO ₂
Vacuum	VAC

In addition, the following terminal units, non-standardized, are included in the sales program:

Compressed Air 6 bar	Air 6-10 bar
Nitrogen	Nitrogen

	Compressed gas terminal unit	Vacuum terminal unit
Operating Pressure	5 bar	≥ 0,6 bar abs.
Flow Rate	40L/min	25L/min
Looking Mechanism	In two levels (standby and operating position)	
Maintenance Valve	Change of check valve and O-ring under pressure	
Connection to Piping System	Copper pipe 10x1mm for all couplings	
Plaster Compensation	Variable from 0 to 20mm, with adapter up to 40mm possible	

DIN STANDARD TERMINAL UNITS CONCEALED | EXPOSED OUTLET



BACK ENTRY



DIN STANDARD MEDICAL GAS OUTLETS

BENEFITS

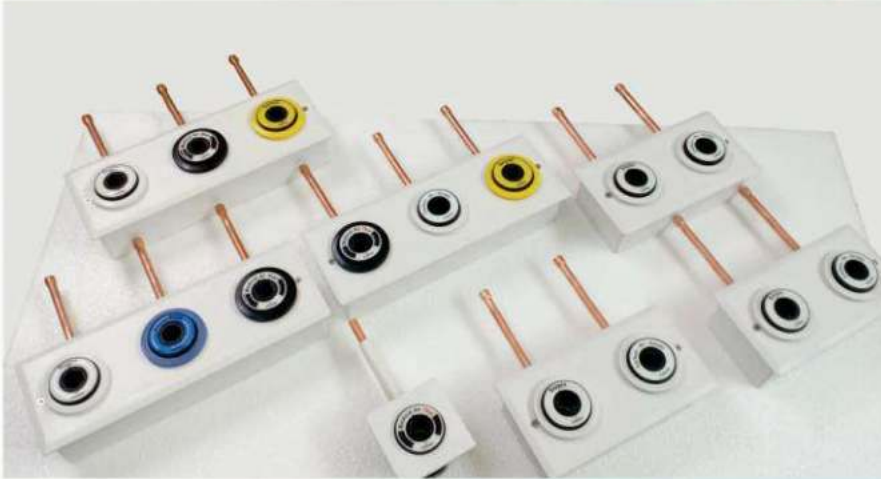
HIGH INSTALLATION VARIABILITY

Special base block groups (first fixes) were created for universal installation of terminal units - for example in and on walls, in media panel systems or in supply units. Particularly in medical supply units used in induction rooms, ORs, intensive and normal wards, the required gases as well as vacuum can be supplied reliably and at all times.

UNIFIED COLOUR AND APPEARANCE

When installing new terminal units or in the case of maintenance, it is also recommended to change to a unified colour and appearance system - especially in areas accessible to the public. This has a positive effect on visitors patients and creates a pleasant and harmonious impression. A complete cost-intensive retrofit that has not been planned can be avoided this way, since individual units are gradually equipped with new release bushings in the course of service and maintenance work.

2/3 Gas Box (Open / Concealed)



PRODUCT FEATURES AT A GLANCE

- ❖ Modern, appealing design.
- ❖ Convex design of the release bushing for an optimal wipe disinfection.
- ❖ Effective and risk-free maintenance as well as replacing of plug -in couplings without disrupting hospital operations.
- ❖ Gas-type specific coding of all relevant components for a safe plug-connection.
- ❖ Choice of colour-neutral or ISO 32 colour system.
- ❖ Versions are available for wall mounting (flush/surface) and supply units.
- ❖ Park position for a safe storage of the probe (Parking facility for Probes)
- ❖ No Corrosion.
- ❖ MRI Compatibility.
- ❖ Meets the requirements of DIN EN ISO 9170, part 1 and DIN 13260, part2
- ❖ Quality management certificate acc. to ISO 9001/ISO 13485 and Annex II. 3MDD

DIN STANDARD TERMINAL UNITS TOP ENTRY



MEDICAL GAS TERMINAL UNIT

BS (BRITISH STANDARD)

The **S-Kumar** Terminal BS STANDARD in the India under BS EN 13485 Medical Devices: Quality Management Systems. The units comprise of a first fix, second fix and a second fix valve assembly and connect medical appliances to the gas supply system.

The first fix comprises of a brass pipeline termination cylinder with a 12mm BS EN 13348 copper pipe for brazing to the fixed pipeline system, or with a NIST BS EN 18082 (non-interchangeable screw thread) connector for connection to a hose assembly. A mounting box suitable for both surface and flush installations is also provided.



The **S-Kumar** Terminal Unit is designed to enable gas probes to be connected and disconnected easily and with minimal effort and the same time as giving a strong, reliable and secure connection. They are available for oxygen, nitrous oxide, medical air, surgical air, medical vacuum, carbon dioxide, nitrogen.

The terminal units can be flexibly integrated into any type of installation including surface, flush, bedhead and pendant and are supplied with Test plugs are included with flush, surface, and bedhead types for first fix pressure testing on site.

MEDICAL GAS TERMINAL UNIT

JIS STANDARD (JAPANESE)



FEATURES & SPECIFICATIONS

- ❖ Colour coded for easy gas service identification according to ISO 32.
- ❖ Special Stop Valve provided for maintenance.
- ❖ Multiple assembly methods.
- ❖ 100% tested and individually packaged.
- ❖ Japanese Standard is compliant with ISO 9170-1 and JIST 7101.
- ❖ High Quality forged brass block.

MEDGAS OUTLET (MC70)



FEATURES

- ❖ Simple to install.
- ❖ Easy Maintenance.
- ❖ Single Lock, Front Loading.
- ❖ All type mounting available (Top | Back | Hose | Thread connection)



HOOKLOOSE (EMERALD) OUTLET



HIGHLIGHT

- ❖ Parking facility available.

SHREDDER TYPE OUTLET



MEDICAL GAS PIPELINE ACCESSORIES

Back Pressure Compensated Flow Meter

- ❖ Chromium Plated brass body.
- ❖ Flow range 0-15 LPM.
- ❖ Metering tube and cover made of unbreakable poly carbonate.
- ❖ Flow adjustment by needle valve equipped with inlet filter - 100um.



Neonatal Flow Meter

- ❖ 0 - 3 LPM
- ❖ 0 - 5 LPM



Oxygen | Air Flow Meter

- ❖ Flush flow 60 LPM.
- ❖ Read the flow on the center of the ball.
- ❖ Inlet Pressure 60 psi.

MOX Regulator with Flow Meter



FA Valve with Flow Meter





Bubble Humidifiers

- ❖ Available with safety valve.
- ❖ Lids made of ABS Plastic virgin.
- ❖ Jar made of unbreakable Poly Carbonate.
- ❖ Valve Pressure Brass Chromium plated.
- ❖ Humidifier Jar may be steam onfo cleaved / gas sterilized.

WARD SUCTION UNITS



600ml



1000ml



2000ml (CLIP TYPE JAR)

FEATURES

- ❖ Capacity of Jar - 600ml / 1000ml / 2000ml / 5000ml
- ❖ Flow range control 0 to 700mm/Hg.
- ❖ Over flow safety valve provided in the lid assembly.
- ❖ Lid made of ABS Plastic Virgin.
- ❖ Jar made of unbreakable poly carbonate.
- ❖ Jar can be steam sterilized up to 134*c
- ❖ Vacuum control regulator with ON / OFF Knob.



5000ml

VAC PLUS[®] REGULATOR



TRAP UNIT[®] S-Kumar EASY VAC

Used to protect the equipment & Plant up stream, should the over flow valve in the main container not being working properly.

* with bacteria filter

Quick I/O push switch button to stop suction





Available In Low Suction 0 - 250mm/hg

Suction Hose



THEATRE SUCTION UNIT

TROLLEY MODEL WITH TRAP UNIT

Features:

- ❖ Mobile Unity.
- ❖ Unbreakable Poly carbonate Jars 2 no's (Capacity 200ml each).
- ❖ ABS Lid with overflow safety valve.
- ❖ Special 3 way valve provided to operate either left hand or Right hand side and also both can be operated simultaneously.
- ❖ Regulator provided to control the negative pressure from 0-700mm/Hg with ON/OFF knob.

Used to protect the equipment & Plant up stream, should the over flow valve in the main container not being working properly.

* with bacteria filter



T.S.U with out Trap Unit



5000ml Collection Jar



- ❖ Auto Cleavable Jars Steam Sterilized up to 134*c
- ❖ All the items are assembled on a aluminum powder coated trolley with Castors for ease of mobility.

BED HEAD PANELS

WITH RAILS (SK | BHP | WR)



VERTICAL BED HEAD PANELS

(SK|VBHP)



BED HEAD PANEL Without Rails

(SK|BHP|WIOR)



These panels are specially designed as per the Hospital Standards. The panels are available in various lengths 350mm to 3.5mts in single length. These are powder coated as per the customer's color choice.

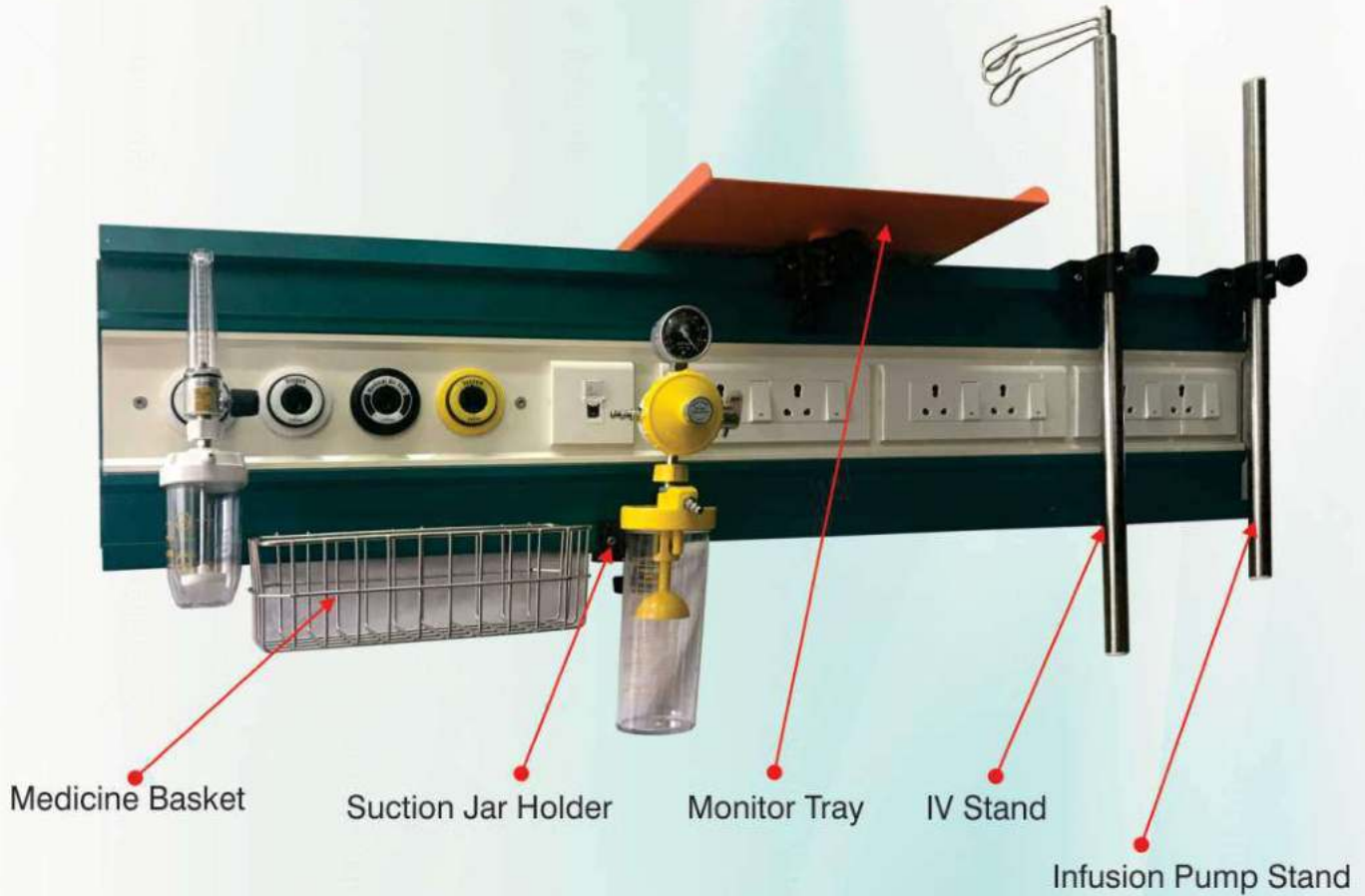
Advantages :

- ❖ Corrosion Free
- ❖ Moisture Free.
- ❖ Specially designed to with stand the fumigation process in the ICU.
- ❖ No Problem of bed bugs / termites.
- ❖ The panels last long and even in case of fire they are safe and do not add to the fire hazards.
- ❖ By use of these panels the available space in the room is used very economically.
- ❖ The use of S-Kumar Bed Head Panels is a one time economic investment.

BED HEAD PANELS



BED HEAD PANEL AND ACCESSORIES



BED HEAD PANEL AND ACCESSORIES

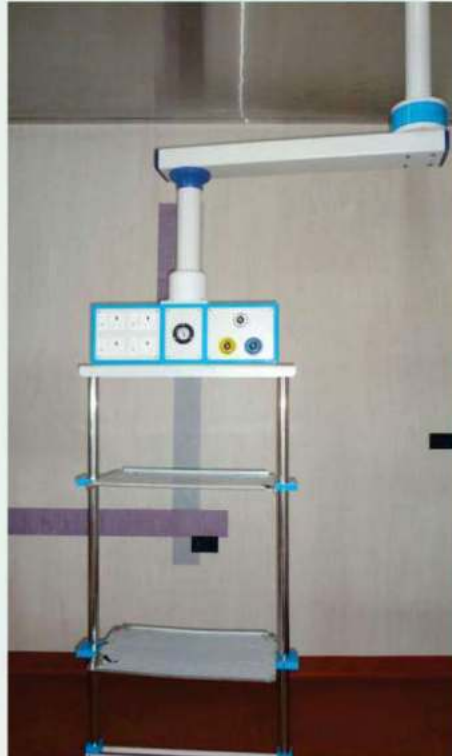


HORIZONTAL TYPE O.T. PENDANTS

SK | O.T. | HRP
Rigid



SK | O.T. | HSAP
Single Arm



SK | O.T. | HDAP
Double Arm



S-Kumar Provides tailored ceiling mounted PENDANTS AND COLUMNS in accordance with your needed duties. Our solutions apply to Surgical and Anaesthesia application as well as in Intensive Care Units, Neonatology, Recovery Room and Emergency Room.



VERTICAL TYPE O.T. PENDANTS

SK | O.T. | VDAP
Double Arm



SK | O.T. | VSAP
Single Arm



SK | O.T. | VRP Rigid



- ❖ 330* at all joints.
- ❖ Maximum number of service components (Electrical Outlets and Terminal units) based on customer request.

With an especially high load capacity and a wide range of configuration to choose from, the S-Kumar ceiling supply unit offers Virtually unlimited horizontal and vertical positioning options for your OR workstation.

Ceiling Mounting - Suspended ceiling depth up to 1200mm mounting on concrete ceiling uses heavy duty anchors (Other Construction also possible)

Arm - Aluminum extruded Heavy - Length - 500mm, 750mm, 1000mm and their combination.

Console - Aluminum extruded - Power coated.

SK | O.T. | VDAP ICU Pendant



ICU Pendant



SK | ICU | SAP



SK | Multifunction Pendant



ICU - SINGLE ARM PENDANT



ENDOSCOPY PENDANT (SK | CH)



ICU - SLIM PENDANT



- ❖ Pendant console is made of aluminum extrusion powder coated.
- ❖ Arm - Heavy aluminum extruded.
- ❖ High load capacity bearing used.
- ❖ Maximum number of Gas outlets and electricals can be provided as per customer request.
- ❖ Trays - Aluminum / Plastic Qty. as required by customer.
- ❖ Color - optional as per customer request.
- ❖ Easy rotation movement.
- ❖ IV stand / Infusion Pump stand / Monitor Stand - Optional.
- ❖ Good aesthetic and pleasing appeal to operating room / ICU.
- ❖ Medicine basket optional.

PNEUMATIC BRAKE PENDANT

(single/double arm)

- ❖ Single Arm (SK | PBP | SA)
- ❖ Double Arm (SK | PBP | DA)
- ❖ 330* at all joints.
- ❖ Pneumatic brake is provided at all joints.



❖ SK | IMP | SA

❖ SK | IMP | DA



❖ SK | IMP | RP



ICU COMBINATION PENDANT

(Single & Double Arm)



ICU COMBINATION PENDANT

(Single & Double Arm)









S-Kumar Engineering Works

Innovation for Life

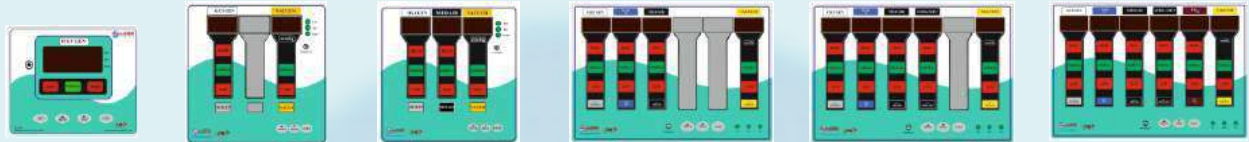
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ALARMS FOR MEDICAL GAS PIPE LINE SYSTEM



S Kumar Medical offer two alarms to monitor current status of Central Medical Gas Supply & Vacuum System and trigger dual alarm (Audio & Visual) in case of any deviation from the predetermined set parameters. These alarms can be conveniently located to any area / zone / operating rooms / ward areas / ICU / CCU in consultation with the health care personnel to signal the user with an auditory and visual alert of the MEDICAL GAS PIPELINE SYSTEM (MGPS). It have been designed to meet the class II b requirements of MDD 93/ 42 / EEC and amendment MDD / 2007 / 47 / EC.

Digital Alarm System:

It is a digital microprocessor based alarm system and the sensing is done through highly sensitive transducer.

Analogue Alarm System:

It is an Analogue alarm which sense the set pressure deviations through pressure switch.

Both the Gas Alarm System can be ordered for any combination of medical gases including Vacuum and configured accordingly to a maximum of six gases in the factory prior to shipment.

External power adaptor that delivers output voltage of 12V DC, required only for auditory and visual signals.

The auditory signal can be cancelled only by the “MUTE” button or fault correction, However, the red display will blink and continue to indicate abnormality as long as a fault condition exists. Reset is automatic with the correction of the fault condition.

Mounting : Wall Mounted Type

Medical Gas Pipeline Connection: 3/8” BSP Nut & Nipple

Caution : To Ensure that specific Gas and Vacuum are connected to the Alarm ports.

Dual Alarm: Audio Alarm : **Buzzer- approx 70 dB**



COMPLY WITH :
 BS EN ISO : 7396 –1: 2016
 BS EN 60601–1–8 : 2007
 HTM 02-01 Part A : 2006



Features:

- Gas Specific Temperature compensated silicon pressure sensor (Transducer).
- Operating Temperature Range - °C[°F] : -40 [-40] to 85 [185]
- Humidity: (Dry gases): 0% to 95% RH, non-condensing
- Accuracy: ±25 % Full Scale Span
- Display Character: 0.5”red LED character, three-figure
- High/Low set points – Set points shall be adjusted by two on board push buttons.
- “PUSH TO TEST” & “MUTE” buttons are easily accessible to operate and test the unit.
- Alarm have no moving parts and require no maintenance after initial installation.
- Dust protected enclosure.
- Option to keep Power Adapter external or park inside the unit.
- Option for wall and conceal mounting.



Technical Information :

Medical Gases & Medical Services	Nominal Pressure BS ENISO 7396 - 1:2016	Triggering of Alarm*	
		Low	High
Oxygen , Nitrous Oxide, Medical Air, Carbon-Di-oxide	58 psi (4bar)	not < 58 psi (4bar)	not > 72 psi (5bar)
Air / Nitrogen for Surgical Tool	116 psi (8bar)	not < 107 psi (7bar)	not > 145 psi (10bar)
Vacuum	300 mm Hg (5.8 psig)	260 mm Hg (5 psig)	-

* Factory settings : Range can be altered in consultation with the healthcare personnel.

Ordering Information:

MEDICAL GASES & VACUUM SERVICES	ANALOGUE	DIGITAL
1 GAS - OXYGEN	On Request	MA-1G
2 GAS - OXYGEN & VACUUM	On Request	MA-2G
3 GAS - OXYGEN , NITROUS OXIDE / MEDICAL AIR & VACUUM	Not available	MA-3G
4 GAS - OXYGEN , NITROUS OXIDE ,MEDICAL AIR & VACUUM.	Not available	MA-4G
5 GAS - OXYGEN , NITROUS OXIDE ,MEDICAL AIR , AR 7 & VACUUM.	Not available	MA-5G
6 GAS - OXYGEN , NITROUS OXIDE ,MEDICAL AIR , AR 7 , CO2 & VACUUM.	Not available	MA-6G

NOTE - Power adaptor 230V AC / 12V DC supplied with the Alarm.

Disclaimer:

Alarm meet and exceed the requirements of relevant standard at the time of manufacture. However piping source, capacity, sizing and restrictions may prevent from attaining the stipulated value.



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S-KUMAR
 MEDICAL

S-KUMAR ENGINEERING WORKS
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VALVE CONTROL WITH ALARM FOR MEDICAL GAS PIPE LINE SYSTEM



Composite Unit – Two Functions	a. Warning - Local Area Alarm
	b. Quick Line Isolation
Audio-visual alarm	a. Highly sensitive sensors
	b. Digital display
	c. Audible alert
	d. Colored visual caution
Emergency shut off	a. Quarter turn valve to break supply



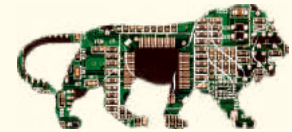
FEATURES

Designed to serve 1,2,3,4 & 5 gas module	Microprocessor based module
Suitable for all medical Gases & Vacuum	Adjustment & parameter setting by touch button
Powder coated aesthetically designed enclosure	Operational parameters can be set in-situ
Vertical Extension Pipes for connection to network	Digital pressure unit in psi / bar or kg/cm ²
PED: 2014/68/EU certified full port Ball Valve (PN 30)	Audio mute option



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COMPLY WITH :
 BS EN ISO : 7396 –1: 2016
 BS EN 60601–1–8 : 2007
 HTM 02-01 Part A : 2006
 NFPA 99 : 2015



Conforms to BS EN ISO 7396-1:2016, HTM 02-01 Part A & BS EN 60601–1–8:2007 & ISO18082: 2014 + A1 : 2017	
	Class II b - MDR 2017 / 745
Body	Fire retardant dust-proof CRCA 18 SWG steel enclosure
Finish	Powder coating - Enclosure RAL 9010 (As per customer requirement)
Mounting type	Horizontal - Surface mountable
Enclosure dimensions	1 Gas module– 250x300x110; 2&3 Gas module - 500x420x110 and 4&5 Gas module - 600 x 400 x 110 (L x H x W in mm)
Gas services	2, 3, 4 ,5 Gas including Vacuum & 1 Gas excluding vacuum
Gas & Vacuum connections	Pre-piped "K" type medical grade Copper extension pipe 75mm long on the top (Riser) for connecting network gas services.
Extension pipe size	15 mm ø for Gases & 22 mm ø for Vacuum with laser engraved direction signage
Off-line connection	Gas specific NIST connections with NRV provided for external medical gas supply
Flow through NIST	Emergency/maintenance inlet flow rate 500 LPM at 4 bar
Shut-off Valve	Full port ball valves (PN 30) with quarter turn (90°)through butterfly knob
Power connection	External 12 V DC adapter for audio visual display
Warning system	Microprocessor based warning module adjustable in-situ to set operational parameters and digital pressure unit in psi, bar or kg/cm2
Display & Audio signal	Digital & illuminated LED display for "Normal", "High"& "Low" with High/low alarm set points for each gas (Low only for Vacuum) service
	Flashing LED display coupled with audio warning in case of preset deviation with the provision to "Mute" audio signal for 15 minutes max.
	Minimum size of 20 x 15 mm bright LED signals for clear visibility from distance
Sensors	Accurate, calibrated & temperature compensated PCB mount Pressure Sensors Sensing pressure span: 60m bar to 10 bar 1 psi to 150 psi Digital Output Temperature span: 0°C to 50°C (32°F to 122°F) for gases (-) 20°C to 85°C {(-)4°F to 185°F} for Vacuum. Accuracy: 0.25% of FSS BFSL
Information & Control	The information of alarm, current status & test conditions through "Touch button"
Valve access	Re-useable lock assembly after breaking locked door to gain access.
Earthing	Functional earth
Protection	Class II & IP 54
Certifications	Class I - MDD 93/42/EEC Medical Device Quality Management Certificate: ISO 13485:2016 Quality Management System Certificate: ISO 9001: 2015

Ordering Code:

Device Name	Device Mode	Device Description	Device Code
Valve control with Alarm	Wall Mount	Single Gas	AVSU- 1G
		2 Gas including Vacuum	AVSU -2G
		3 Gas including Vacuum	AVSU -3G
		4 Gas including Vacuum	AVSU -4G
		5 Gas including Vacuum	AVSU -5G

Disclaimer: Alarm meet and exceed the requirements of relevant standard at the time of manufacture. However piping source, capacity, sizing and restrictions may prevent from attaining the stipulated value.