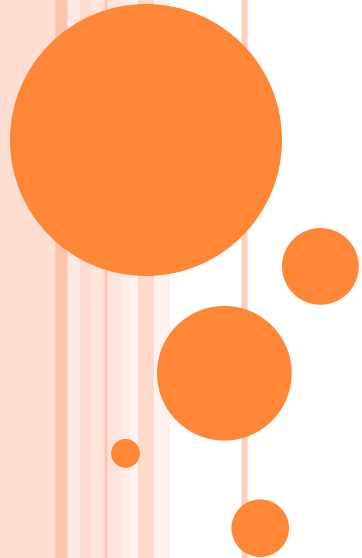




**World Class Gas Detector Manufacturer, from South Korea**

Developing, Manufacturing, Supplying & Servicing Gas Leak Detector Systems



# INDEX

1. Profile
2. Sales
3. Products
4. Certificates
5. Customers
6. Q & A



GTD-2000Ex

# 1. Profile

## 1-1. Overview

## 1-2. Vision

## 1-3. History

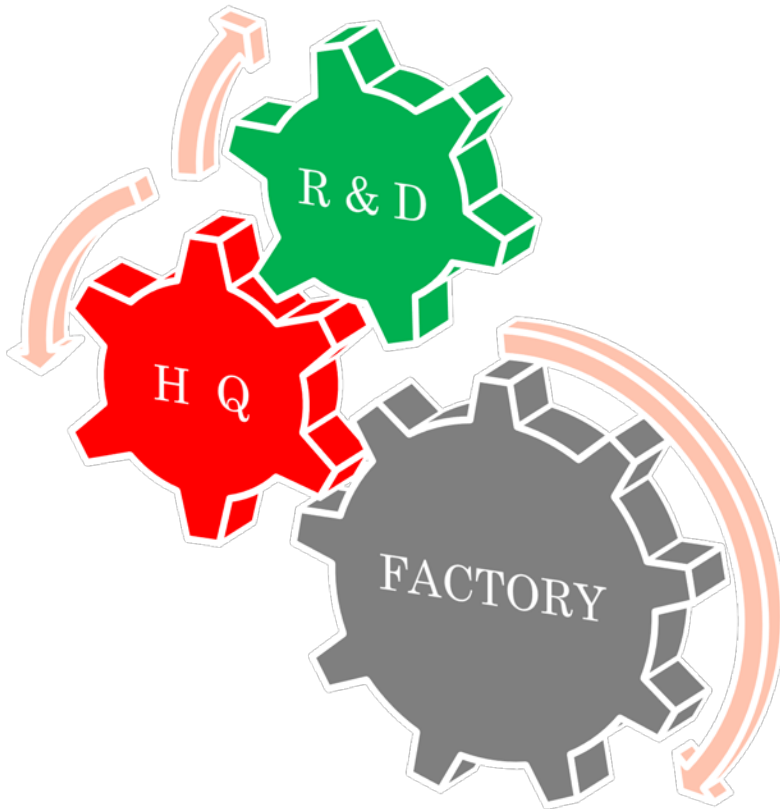
## 1-4. Organization



GTD-2000Tx

# 1-1. Overview

**GASTRON** Limited Company

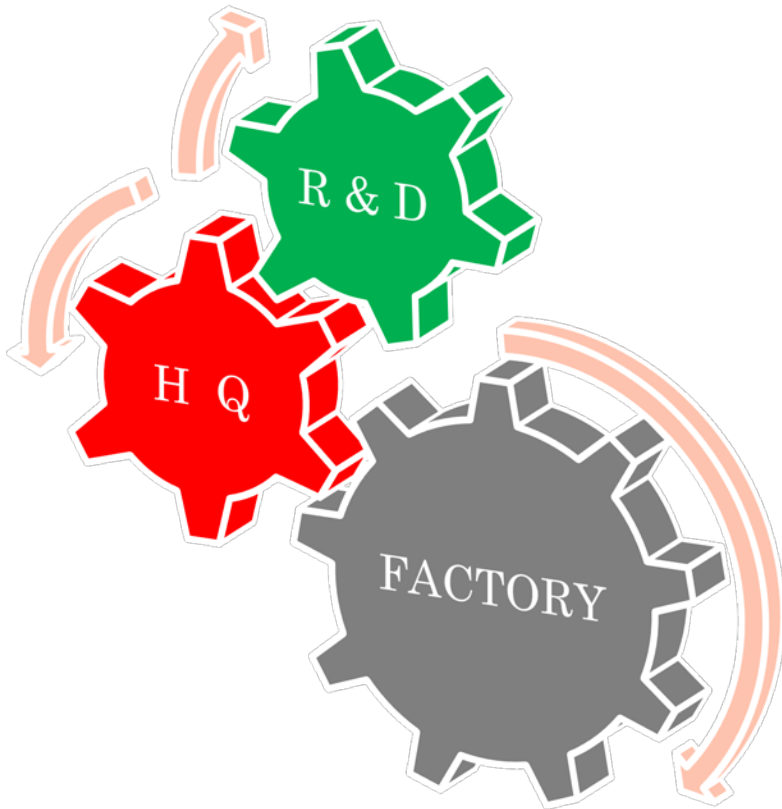


<b>Established</b>	June. 24. 1992
<b>CEO</b>	Dong Jin Choi
<b>Capital</b>	US\$ 500,000
<b>Employee</b>	170 Staff Members
<b>Main Products</b>	Gas leak detectors, Gas monitoring systems



# GASTRON

Gastronics (M'sia) Sdn Bhd



**Established**

Nov. 24. 2004

**Executive Director**

Kim Yung Min

**Capital**

MYR 1,000,000.00

**Employee**

20 Staff Members

**Main Products**

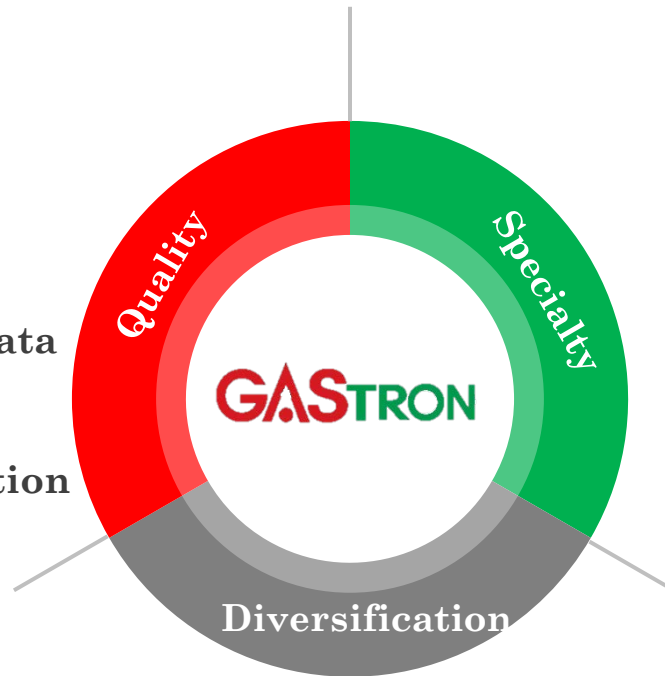
Gas leak detectors,  
Gas monitoring systems  
F&G System  
Calibration service



# 1-2. Vision

## Best Quality

- Choice of Material based on objective data
- Expert of Inspection Qualification



## Specialty

- Sensor Self-Development
- Multi Sensor Application
- In Stages Verification System

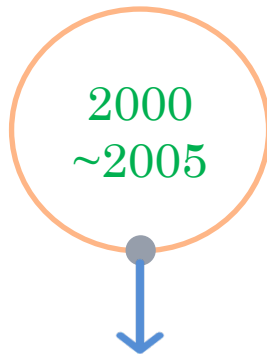
## Diversification

- Variety of Application & Meet Customer's Needs
- Produce Differentiation Products



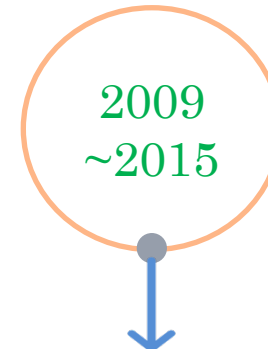
# History

- HWASUNG CO., LTD was founded
- Excellent Products Prize by Commerce & Industry Minister
- ISO 9001 Certified



- Changed company name to GASTRON
- HQ moved to larger facility
- Excellent Company in Gyeonggi-do
- Opened Malaysia Branch Office

- Developed IR Gas Detector, the first one in Korea
- ATEX, IECEX Certified

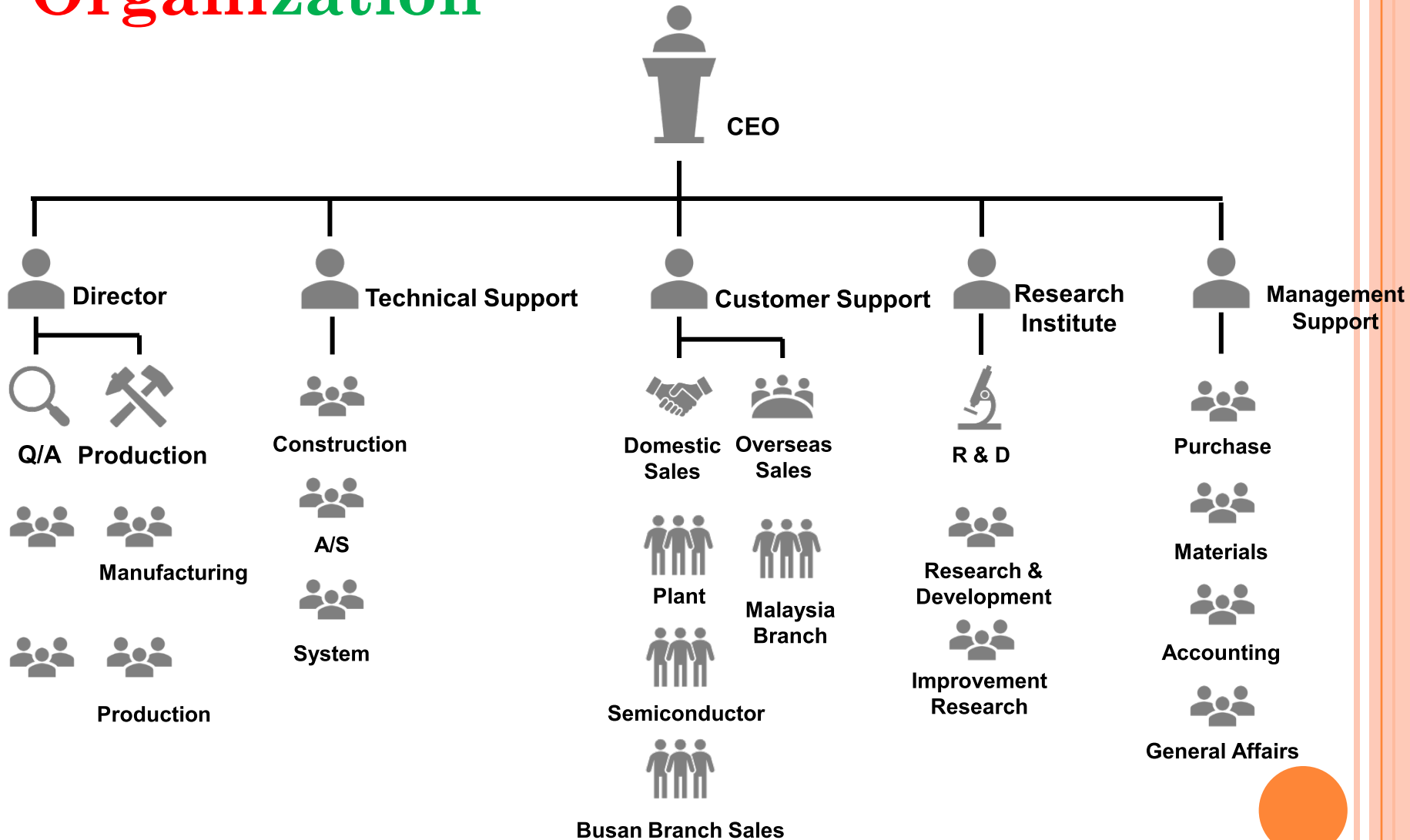


- Register Membership of HART Communication
- MED, BV, DNV, ABS, SIL2 Certified
- Established Young-Nam Branch
- Developed Multi-type gas detector(GTM-1000/2000)

- ISO14001 Certified
- OHSAS18001 Certified
- Industrial Scientific Co. & DOD Technology Partnership
- Developed Small-Size Explosion Proof type Gas Detector (GTD-5100F)



# Organization





# 2.Sales

## 2-1. Yearly Sales Revenue

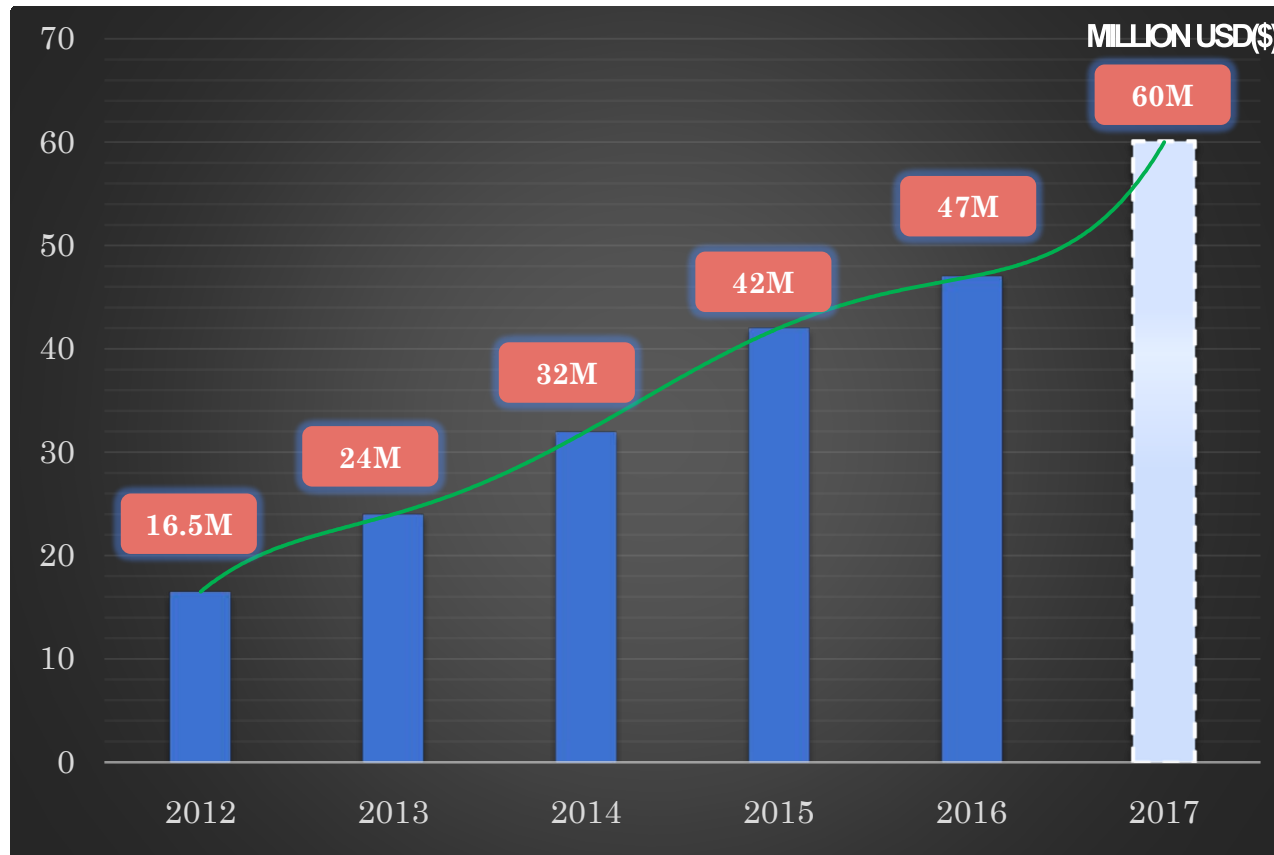
## 2-2. Domestic & International Sales

**GAS**TRON



GTC-200A

## 2-1. Yearly Sales Revenue



## 2-2. Domestic & International Sales



**70%**  
**Domestic**

- **Semiconductor**
- **Domestic EPC PJT**
- **General Industry**
- **Steel**

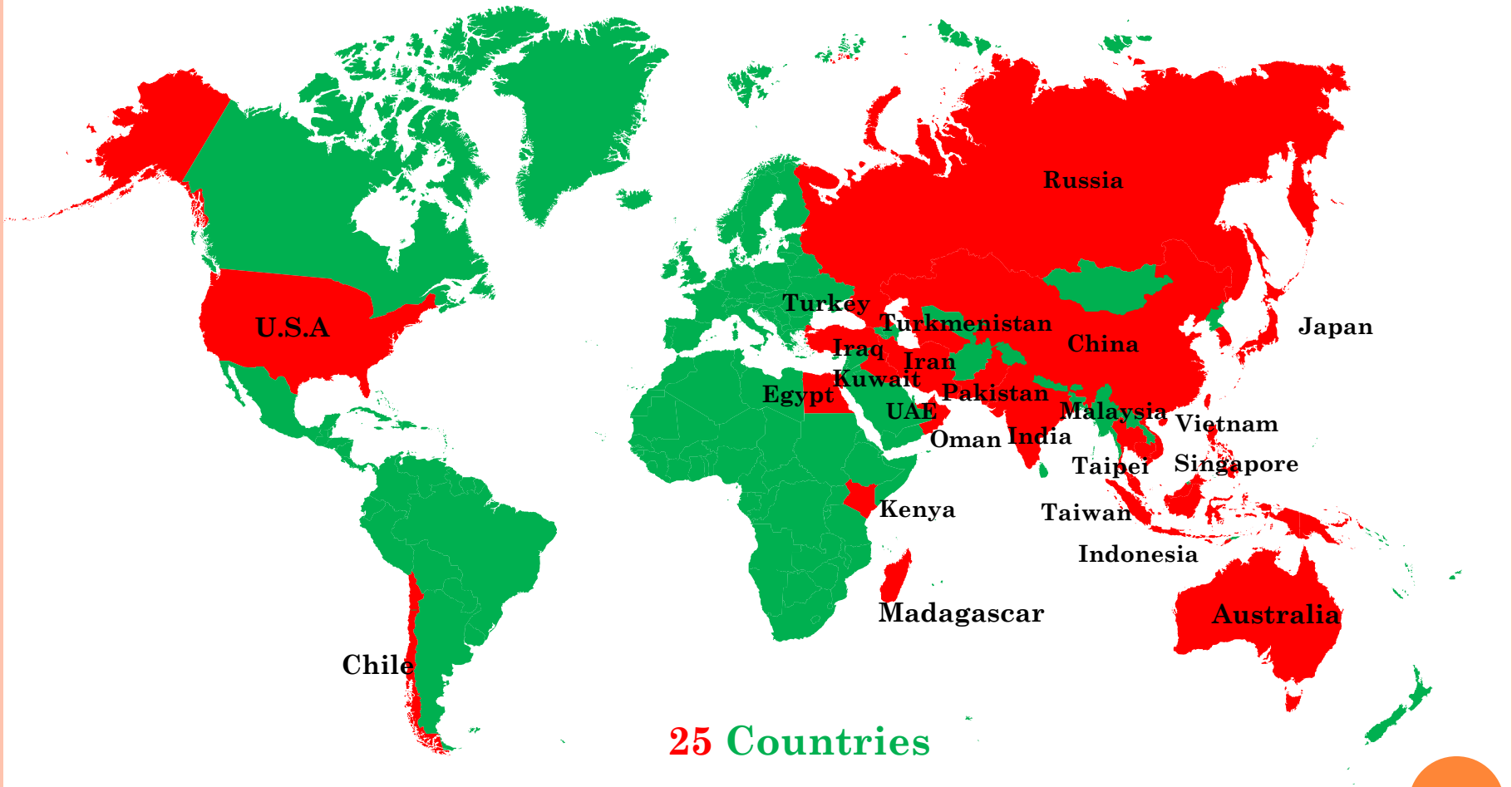


**30%**  
**Overseas**

- **EPC Projects**
- **Distribution**
- **Direct Sales**



## 2-2. International Sales



# 3. Products

3-1. Standard Gas Detector

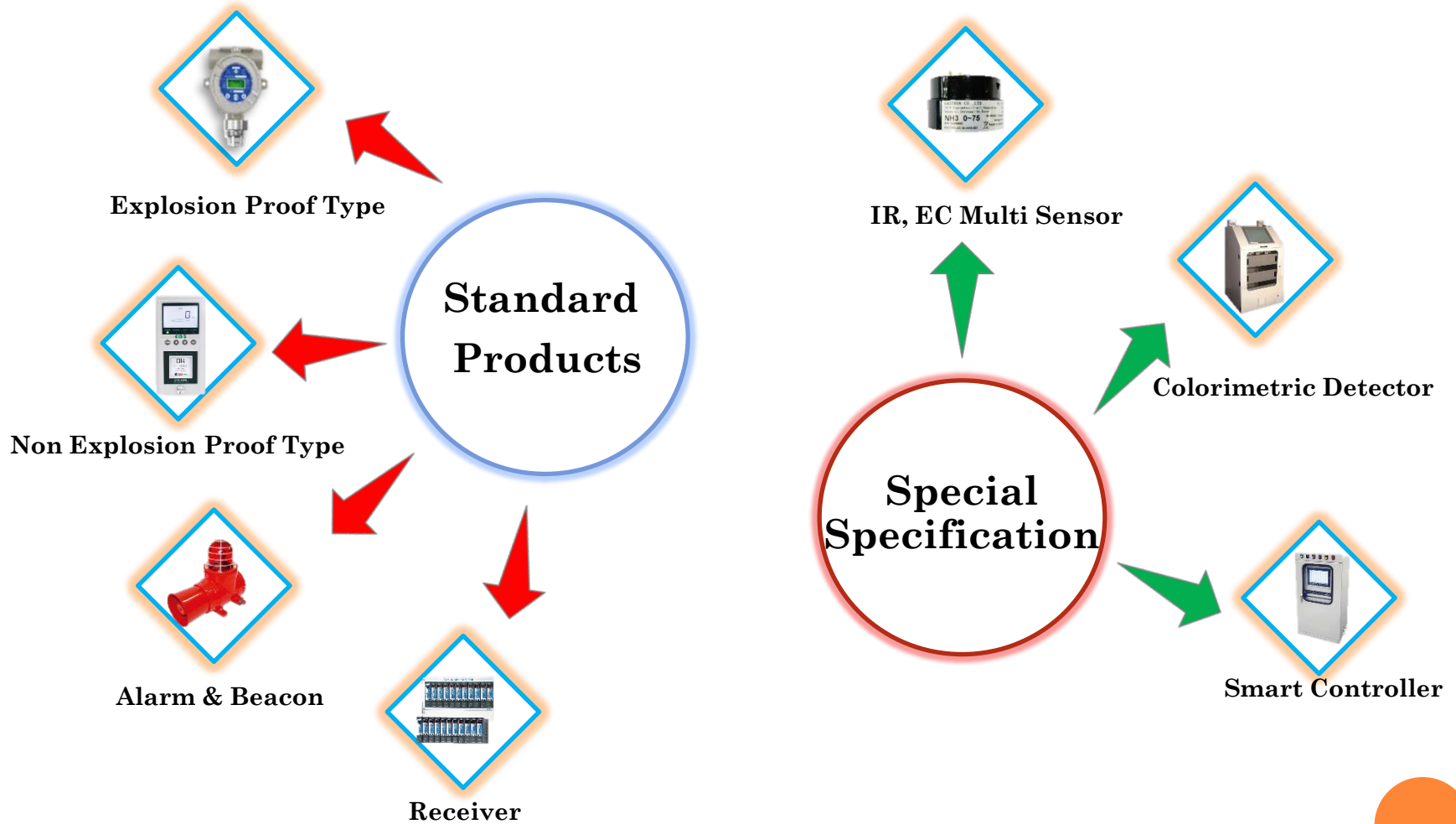
3-2. Special Specification

3-3. New Products

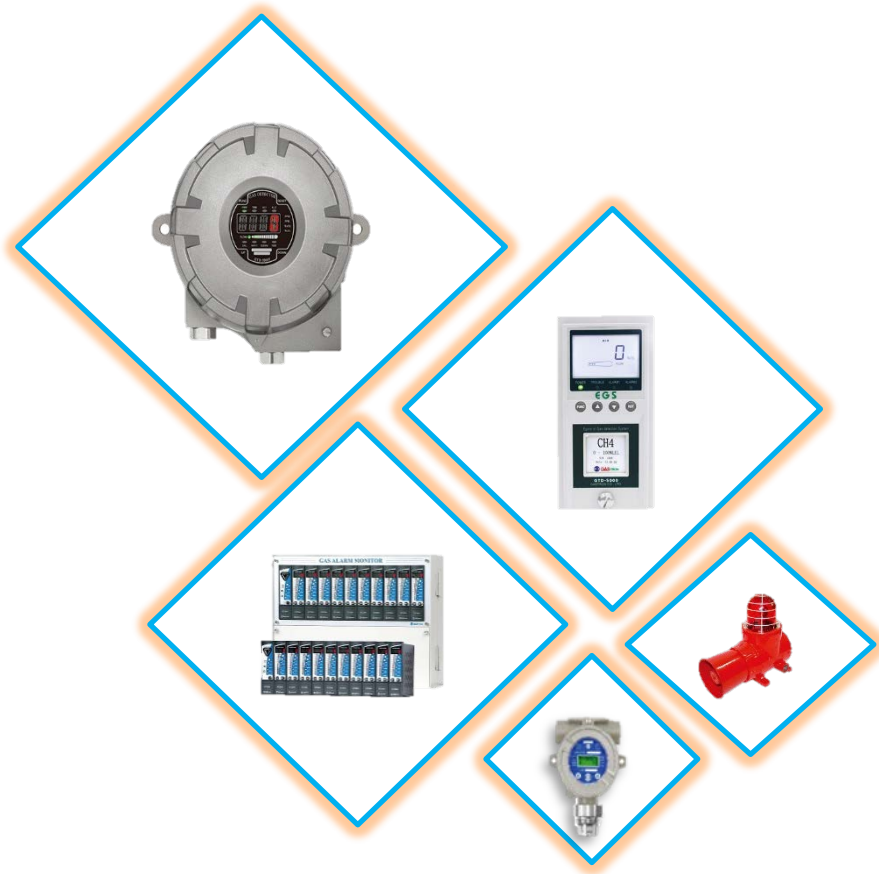


GIR-3000A

# 3. Products



# 3-1. Standard Gas Detector



## 1. Explosion Proof Type

GTD-5000Ex, GTD-5000F Tx

GTD-3000A, GIR-5000 etc. +11 Types

## 2. Non Explosion Proof Type

GTD-5000Tx, GTC-200A

GTC-200F, GTC520F etc. + 6 Types

## 3. Portable Gas Detector Type

GPD-1000, TX1, MX4 etc. + 6 Types

## 4. Flame Detector

GTF-1000, 40/40M, 40/40U etc. + 7 Types

## 5. Alarm & Beacon

GTL-200, BExBE05, MB005 etc. + 10 Types



## 3-2. Special Specification



### 1. Multi Sensor Detector

GTM-1000(Infrared + EC)

GTM-2000(EC Type)

- Detection Maximum 4gases Simultaneously
- Prevent Malfunction for Interference gas

### 2. New Explosion Proof Detector

GTD-5100F

- Suction Function in Explosion proof Type
- 50% Size Down

### 3. Colorimetric Detector

- Discoloration Sensitive Multi Gas Detector
- Colorimetric without Mulfunction
- ppb Detectove





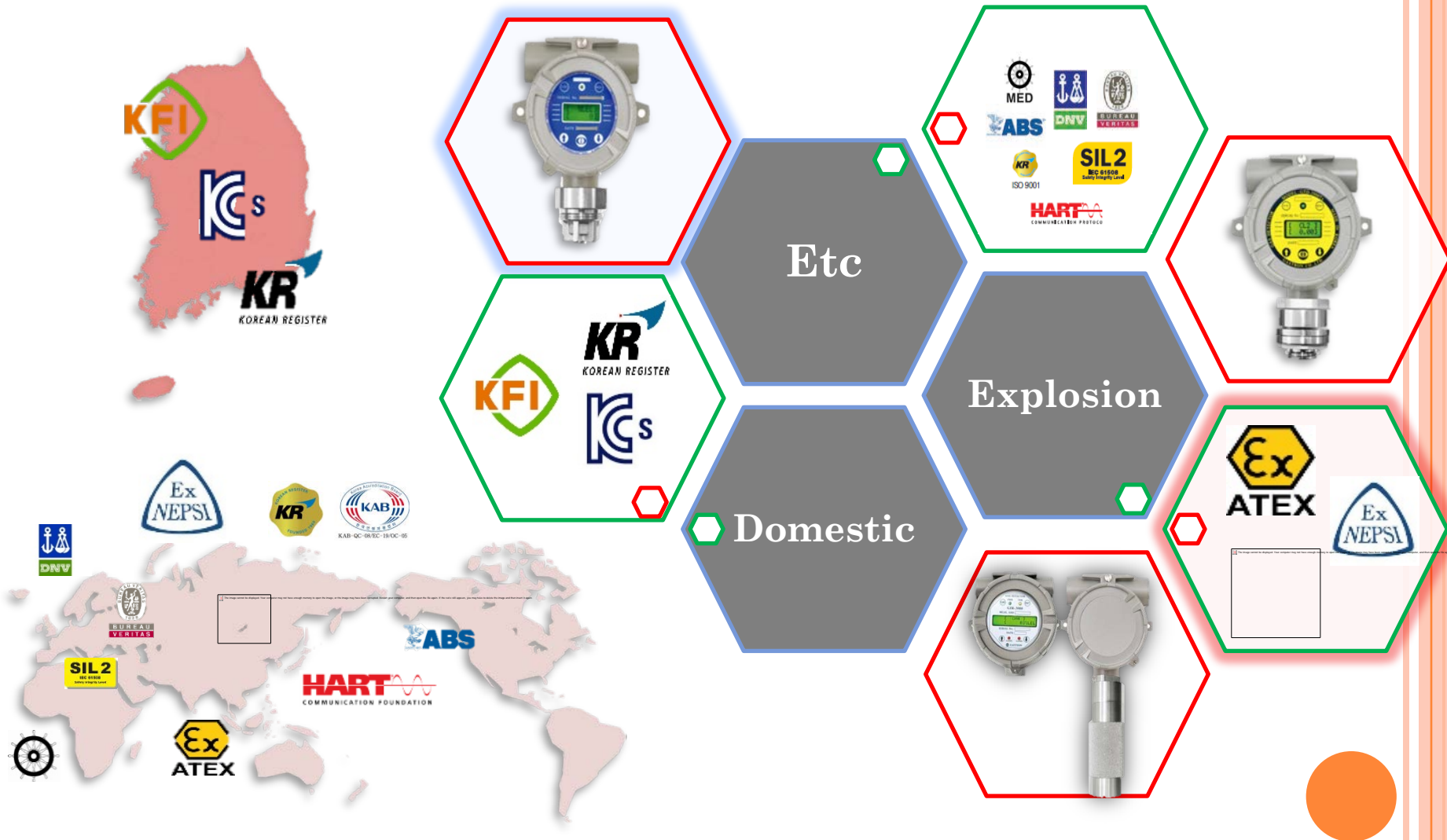
## 3-3. New Products



- The First Maximum 4 Types Sensor Module Transmitter
  - IR Type (G100), EC Type (G200), Catalytic (G300) Sensor
  - MODBUS, HART etc. Support Various Smart Function & Interface
- 
- Established Production Line of EC Type Sensor at First in the Field
  - Produce Semiconductor H<sub>2</sub>S Gas Sensor at First in the Field
  - H<sub>2</sub>, H<sub>2</sub>S Sensor Development based on Chalcogenide Nano Structure
- 
- Gas Detectors & Flame Detectors Control System
  - Maximum 16 expandability with lightning and Smart Function
- 



# 4. Certificates



# 5. Customers(Overseas)

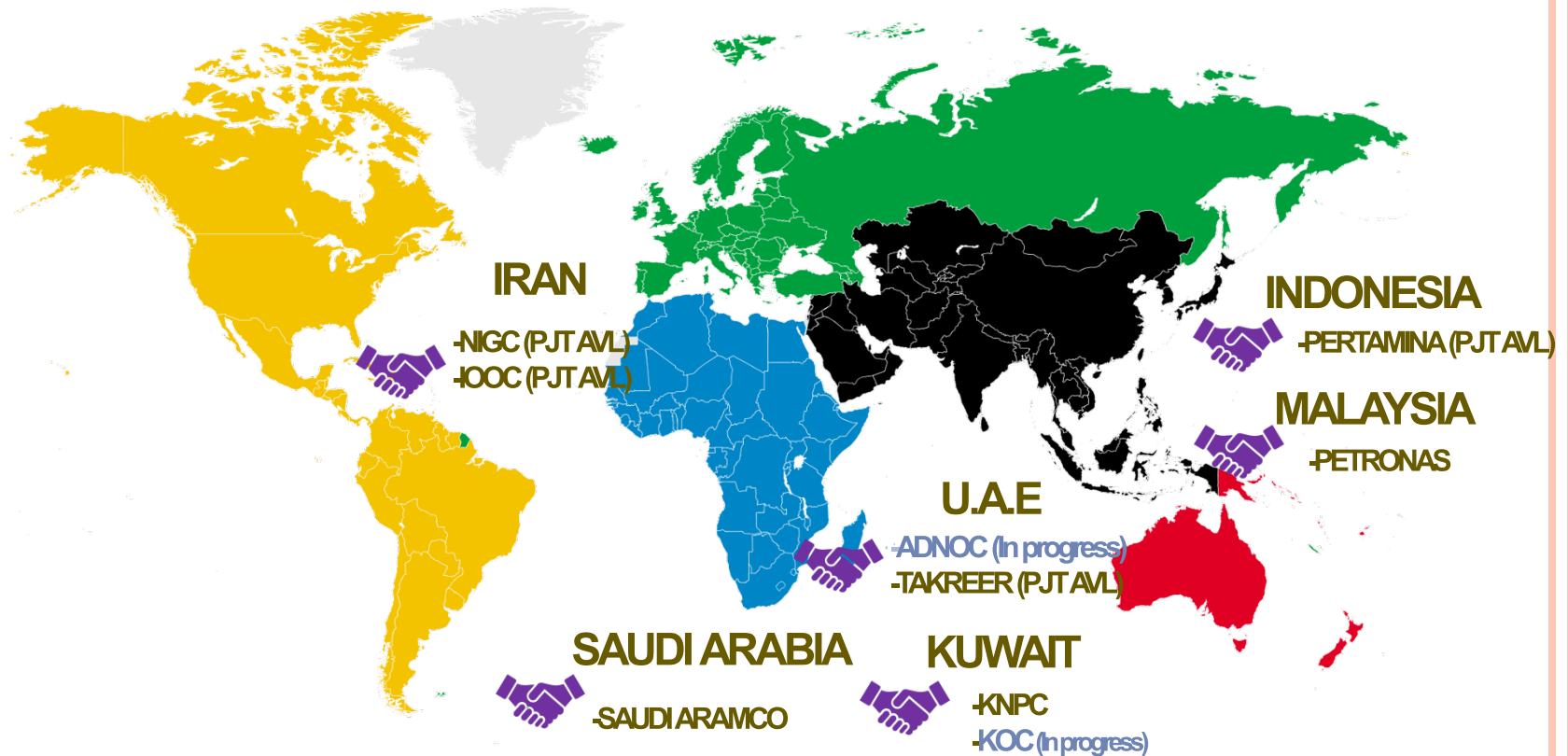


# 5. Customers (Domestic)

Local

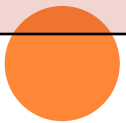


# 5. Customers (Vender Registration)



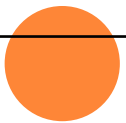
# 5. Customers

N O.	Customer	Country	EPC	Project	Items	Years
1	SAMSUNG ELECTRO-MECHANICS	Korea	SAMSUNG ELECTRO-MECHANICS	ELECTRONICS	COMBUSTIBLE & TOXIC GAS DETECTOR	2010~
2	LG DISPLAY		LG DISPLAY	ELECTRONICS		
3	KCTECH		KCTECH	SEMICONDUCTOR		
4	LINDE		LINDE	GAS MANUFACTURER		
5	HYUNDAI STEEL		HYUNDAI STEEL	STEEL	STEEL	
6	KOLON LIFE SCIENCE		KOLON LIFE SCIENCE	LAB	HEALTH & MEDICAL	
7	SK METATERIALS		SK METATERIALS	PLANT	GAS DETECTION SYSTEM	
8	SAMSUNG ELECTRO-MECHANICS		SAMSUNG ELECTRO-MECHANICS	PLANT		
9	HYUNDAI MOTOR COMPANY		HYUNDAI MOTOR COMPANY	PLANT		
10	HANWHA CHEMICAL		HANWHA CHEMICAL	PLANT		



# 5. Customers

N O.	Customer	Country	EPC	Project	Items	Years
11	KRICT	Korea	KRICT	LAB	GAS DETECTION SYSTEM	2010~
12	KDHC		KDHC	PLANT		
13	KOREA WESTERN POWER Co Ltd		KOREA WESTERN POWER Co Ltd	PLANT		
14	KOREA EAST-WEST POWER CORPORATION		KOREA EAST-WEST POWER CORPORATION	PLANT		
15	KUMHO PETROCHEMICAL Co Ltd		KUMHO PETROCHEMICAL Co	PLANT		2011~
16	SK HYNIX		SK HYNIX	SEMICONDUCTOR		
17	AIR LIQUIDE		AIR LIQUIDE	GAS PRODUCTION		
18	LG SILTRON		LG SILTRON	PLANT		
19	SAMSUNG SDI		SAMSUNG SDI	PLANT		
20	KAERI		KAERI	LAB		



## 5. Customers

N O.	Customer	Country	EPC	Project	Items	Years
21	POSCO	Korea	POSCO	PLANT	GAS DETECTION SYSTEM	2011~
22	KOGAS		KOGAS	PLANT		
23	AIR LIQUIDE KOREA		AIR LIQUIDE KOREA	GAS MANUFACTURER	COMBUSTIBLE & TOXIC GAS DETECTOR	
24	LG ELECTRONICS SORLA		LG ELECTRONICS SORLA	PLANT	GAS DETECTION SYSTEM	2012~
25	KOREA WATER RESROUCES CORPORATION		KOREA WATER RESROUCES CORPORATION	PLANT		
26	TAEKWANG INDUSTRIAL Co Ltd		TAEKWANG INDUSTRIAL Co Ltd	PLANT		
27	LG HAUSYS Ltd		LG HAUSYS Ltd	PLANT		
28	KRISS		KRISS	LAB	GAS DETECTION SYSTEM	2013~
29	SHINSUNG SOLAR ENERGY		SHINSUNG SOLAR ENERGY	SOLAR ENERGY	COMBUSTIBLE & TOXIC GAS DETECTOR	
30	SK INNOVATION		SK INNOVATION	REFINERY	GAS DETECTION SYSTEM	



## 5. Customers

N O.	Customer	Country	EPC	Project	Items	Years	
31	KOREA SOUTHERN POWER Co Ltd	Korea	KOREA SOUTHERN POWER Co Ltd	PLANT	GAS DETECTION SYSTEM	2014~	
32	KOLON FASHION MATERIAL Inc		KOLON FASHION MATERIAL Inc	PLANT			
33	YUHAN KIMBERLY Ltd		YUHAN KIMBERLY Ltd	PLANT			
34	DOOSAN HEAVY INDUSTRIES & CONSTRUCTION Co Ltd		DOOSAN HEAVY INDUSTRIES & CONSTRUCTION Co Ltd	PLANT			
35	KCC		KCC	PLANT			
36	KISWIRE Co Ltd		KISWIRE Co Ltd	PLANT	GAS DETECTION SYSTEM / SAFETY SHEILDS	2015~	
37	KOLON INDUSTRY INC		KOLON INDUSTRY INC	CHEMICAL			
38	ETRI		ETRI	LAB			ELECTRONICS TELECOMMUNICATIONS
39	POONG SAN Co Ltd		POONG SAN Co Ltd	PLANT			GAS DETECTION SYSTEM
40	LG LIFE SCIENCES Ltd		LG LIFE SCIENCES Ltd	PLANT			

## 5. Customers

<b>N O.</b>	<b>Customer</b>	<b>Country</b>	<b>EPC</b>	<b>Project</b>	<b>Items</b>	<b>Years</b>
41	LS-NIKKO COPPER Inc	Korea	LS-NIKKO COPPER Inc	PLANT	GAS DETECTION SYSTEM	2015~
42	KOREA HYDRO & NUCLEAR POWER Co Ltd		KOREA HYDRO & NUCLEAR POWER Co Ltd	PLANT	GAS DETECTION SYSTEM	
43	HANWHA-QCELLS		HANWHA-QCELLS	SOLAR ENERGY	COMBUSTIBLE & TOXIC GAS DETECTOR	2016~



# 5. Customers

NO.	Customer	Country	EPC	Project	Items	Years
1	ARNA	Mahdia, Algeria	HYUNDAI ENGINEERING	Ain Arnat 1200MW combined cycle power plant	GTD-2000Ex Combustible (CH4) GTC-200 Receiver Card	11th Oct, 2013
2	LUKOIL Uzbekistan Operating Company	Uzbekistan	HYUNDAI ENGINEERING	CONSTRUCTION OF CPF COMPLEX AND DEVELOPMENT OF KANDYM GROUP OF FIELDS (Gas Detector and Alarm Device)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S)	26th.Aug.2015
3	STATE CONCERN "TURKMENGAS"	Turkmenistan	HYUNDAI ENGINEERING	ETHANCE CRACKER UNIT (Gas Detector)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (CO, O2)	1th.Apr.2015
4	OMAN OIL COMPANY EXPLORATION & PRODUCTION LLC	OMAN	HYUNDAI ENGINEERING	MUSANDAM GAS PLANT Project	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S, CL2)	18th.Sep.2012
5	GAZPROM NEFT	Iraq	SAMSUNG ENGINEERING	EPC CPF PHASE 2 AT BADRA OILFIELD (Gas Detector_1st)	GIR-3000, GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S, SO2, THT, NH3)	15th.Oct.2014
6	PETRONAS	Malaysia	SAMSUNG ENGINEERING	PETRONAS TGAST PHASE 1 (Gas Detector)	GTD-2000Ex Combustible (CH4) Toxic (H2S)	21th.Mar.2014
7	PETRONAS	Malaysia	SAMSUNG ENGINEERING	PETRONAS TGAST PHASE 2 (Flame& Gas Detector)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S, CO2)	10th.Dec.2014
8	ARAMCO	Saudi Arabia	SAMSUNG ENGINEERING	POWER COGENERATION PLANT COMPANY (Gas Detector System)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S)	24th.Oct.2014
9	STATE CONCERN "TURKMENGAS"	Turkmenistan	TOYO ENGINEERING (JAPAN, INDIA)	ETHANCE CRACKER UNIT (ECU) (Gas Detection Devices)	GTD-2000Ex Combustible (CH4)	04th.Sep.2015
10	STATE CONCERN "TURKMENGAS"	Turkmenistan	TOYO ENGINEERING (KOREA)	ETHANCE CRACKER UNIT (GSU) (Gas Detector) (Alarm Device)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S)	04th.Aug.2015

# 5. Customers

NO.	Customer	Country	EPC	Project	Items	Years
11	STATE CONCERN "TURKMENGAS"	Turkmenistan	TOYO ENGINEERING (KOREA)	ETHANCE CRACKER UNIT (PP) (Gas Detector) (Alarm Device)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (CO, O2)	04th.Dec.2016
12	EGYPTIAN REFINING COMPANY (TAKRIR) S.A.E	Egypt	GS E&C	ERC REFINERY PROJECT (Gas Detectors)	GIR-3000 Combustible (CH4) GTD-2000Tx Toxic (H2S)	ON GOING
13	P.T. Asahimas Chemical (ASC)	Indonesia	HYUNDAI E&C	ASC PHASE-VI PROJECT (Gas Detectors)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (CL2, VCM, HCL)	9th.Jan.2016
14	P.T. Asahimas Chemical (ASC)	Indonesia	CHIYODA	ASC PHASE-VI PROJECT (Gas Detector)	GIR-3000 Combustible (CH4) GTD-2000Tx Toxic (VCM)	4th.Mar.2016
15	PETRONAS	Turkmenistan	HYUNDAI ENGINEERING	GAS TREATMENT PLANT ONSHORE GAS TERMINAL (GTPOGT) EXPANSION AND MODIFICATION FOR GARAGOL DENIZ WEST OIL DEVELOPMENT PROJECT (Gas Detector)	GTD-2000Ex Combustible (CH4)	18th.Aug.2015
16	Arabian Amines Company	Saudi Arabia	HYUNDAI ENGINEERING	AAC Ethyleneamines Project	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (NH3, EDA, EDC)	2rd.Oct.2009
17	Turkish Petro. Rep. Co.	Turkey	GS E&C	IZMIT DHRP Prkject	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S, CL2)	14th.Aug.2009
18	YACIMIENTOS PETROLIFEROS FISCALES BOLIVIANOS	Bolivia	SAMSUNG ENGINEERING	BOLIVIA YPFB AMMONIA / UREA PROJECT (Gas Detector)	GIR-3000 Combustible (CH4) GTD-2000Tx Toxic (NH3)	30th.Jun.2015
19	ATTOCK REFINERY LIMITED	Pakistan	HYUNDAI ENGINEERING	ARL UPGRADATION PROJECT (Gas Detector)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S)	8th.Nov.2012
20	MALAYSIAN SYNTHETIC RUBBER, SDN BHD	Malaysia	SAMSUNG ENGINEERING	R1-PROJECT (Gas Detector)	GTD-2000Ex Combustible (CH4)	30th.Oct.2013

# 5. Customers

NO.	Customer	Country	EPC	Project	Items	Years
21	PT. PERTAMINA	Indonesia	GS E&C	CILACAP RESID FLUID CATALYTIC CRACKING PROJECT (Gas Detector)	GIR-3000, GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S)	6th.Nov.2012
22	MARAFIQ EXECUTION TEAM	Saudi Arabia	HANWHA E & C	YANBU2 POWER AND WATER PROJECT (Fire & Gas System)	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (NH3, O2, CL2, PH3)	12th.Mar.2012
23	ENERJISA ENERJI URETIM A.S	Turkey	SK E & C	TUFANBEYLI THERMINAL POWER PLANT PROJECT (CO Detection System)	GTD-2000Tx Toxic (CO)	8th.Nov.2012
24	UZ-KOR GAS CHEMICAL LLC	Uzbekistan	HYUNDAI ENGINEERING	USTYURT GAS CHEMICAL COMPLEX UTILITIES & OFFSITES PLANT (Gas Detector)	GTD-2000Ex Combustible (CH4)	7th.Oct.2013
25	UZ-KOR GAS CHEMICAL LLC	Uzbekistan	GS E&C	USTYURT GAS CHEMICAL COMPLEX ETHYLENE PLANT PROJECT (Gas Detector)	GTD-2000Ex Combustible (CH4)	29th.Aug.2013
26	UZ-KOR GAS CHEMICAL LLC	Uzbekistan	SAMSUNG ENGINEERING	USTYURT GAS CHEMICAL COMPLEX GSP, HDPE, PP AND POLYMER PROJECT (Gas & Flame Detector)	GTD-2000Ex Combustible (CH4)	31st.Mar.2014
27	MARAFIQ	Saudi Arabia	HANHWA E & C	Marafiq STG units 5 & 6	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (H2S)	26th.Aug.2015
28	JG Summit Petrochemical Corp.	Philippines	DAELIM INDUSTRIAL	JG Summit Naphtha Cracker Project in Philippines	GIR-3000 Combustible (CH4) GTD-2000Tx Toxic (BENZENE)	29th.Dec.2010
29	TITAN PETCHEM(M) SDN. BHD	Malaysia	Lotte Engineering Construction	T-Project	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (CO)	04th.Nov.2011
30	PT. Petrokimia Butadiene Indonesia	Indonesia	HYUNDAI ENGINEERING.	PBIBDE Project	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (HCL, CO)	16.Jan.2011

## 5. Customers

NO.	Customer	Country	EPC	Project	Items	Years
31	Polysilicon Technology Company	Saudi Arabia	HYUNDAI ENGINEERING	PTC Jubail Polysilicon Project	GTD-2000Ex Combustible (CH4) GTD-2000Tx Toxic (CO, BENZENE)	21. Jul.2011
32	Gas Transmission Company	Bangladesh	HYUNDAI ENGINEERING	Compressor Station Project	GTD-2000Ex Combustible (CH4)	21th.Aug.2012
33	Kenya Electricity Generating Company	Kenya	HYUNDAI ENGINEERING	Olkaria B1 / B2 Project	GTD-2000Tx Toxic (H2S)	09th.Aug.2013



# SALES REFERENCES IN MALAYSIA

<b>No</b>	<b>Customers</b>
1	PETRONAS CARIGALI (TGT) PROJECT
2	PETRONAS GPPB
3	PETRONAS PENAPISAN MELAKA
4	AIR PRODUCT MALAYSIA
5	SAMSUNG ELECTRONICS MALAYSIA
6	SAMSUNG ELECTRONICS DISPLAY MALAYSIA
7	GENTING HIGHLAND
8	GENTING FIRSTWORLD
9	JABIL CIRCUIT
10	KEB OIL & GAS
11	SANMINA.SCI
12	B.BRAUN MEDICAL INDUSTRIES

# SALES REFERENCES IN MALAYSIA

**No**

**Customers**

13

TNB PAKA

14

HARD ROCK HOTEL PENANG

15

ENTEGRIS (M) SDN BHD

16

GOOD YEAR MALAYSIA

17

NGV STATION (WHOLE MALAYSIA)

18

DIAMET KLANG

19

FIKRAH TECHNOLOGY SDN BHD

20

BOSCH MALAYSIA

21

IBIDEN ELECTRONICS MALAYSIA SDN BHD

22

VENTURE ELECTRONICS SERVICES (M) SDN BHD

23

SUNGAI HARMONY

24

INDUSTRIOUS HORIZON SDN BHD



# SALES REFERENCES IN MALAYSIA

<b>No</b>	<b>Customers</b>
25	R & Y ENGINEERING AND CONSTRUCTION SDN BHD
26	EKOKI ENGINEERING SDN BHD
27	INTERACTIVE THERMAL ENGINEERING SDN BHD
28	SAMCHANG ENTERPRISE SDN BHD
29	LP GAS INDUSTRIES SDN BHD
30	GAS WORLD SOLUTION SDN BHD
31	AMANIAGA RESOURCES (M) SDN BHD
32	HEXZA SYNERGY RESOURCES
33	KEJURUTERAAN GOSAN (M) SDN BHD
34	VIRTUAL MULTI-TECH ENGINEERING SDN BHD
35	LSP ADVANCE SDN BHD
36	JW KIARA SDN BHD

# SALES REFERENCES IN MALAYSIA

**No**

**Customers**

37

POWERMILE SDN BHD

38

TNZ ENGINEERING SERVICES SDN BHD

39

PRIMA GAS SDN BHD

40

TERCOMP BMB SDN BHD

41

FREESCALE SEMICONDUCTOR

42

ETIKA DAIRY MILK FACTORY

43

MAYBANK TOWER

44

GAYA MAJU ENGINEERING SDN BHD

45

NXP SEMICONDUCTOR PJ

46

SILTERRA MALAYSIA

47

SUNWAY HOTEL PENANG

48

HILTON HOTEL PJ

49

ISTANA HOTEL KUALA LUMPUR

# SALES REFERENCES IN MALAYSIA

No	Customers
50	PARK ROYAL KUALA LUMPUR
51	MYCRON STEEL FACTORY
52	TENAGASTEK NLPG OIL AND GAS
53	POWERTECH CF ENGINEERING
54	UNIVERSITI TEKNOLOGI MARA (UiTM) SHAH ALAM
55	UNIVERSITI TEKNOLOGI MALAYSIA (UTM) SEMARAK
56	UM LAND SDN BHD
57	OHAYOU SDN BHD
58	TITAN PETCHEM (M) SDN BHD
59	TENAGA NASIONAL BERHAD PORT KLANG
60	SUMITOMO PENANG
61	JAEWON FRONTIER NEGERI SEMBILAN
62	HERSEY FACTORY JOHOR

# SALES REFERENCES IN MALAYSIA

<b>No</b>	<b>Customers</b>
63	HAMPSHIRE PARK KLCC
64	TOP GLOVE
65	HARTALEGA LATEX
66	CHOP ENG HONG LEONG
67	DENSO MALAYSIA
68	MATERIAL SERVICES MALAYSIA COMPLEX JOHOR
69	LW GASTECH SDN BHD
70	AWALTEK SDN BHD
71	FLOW GAS SDN BHD
72	SIME DARBY OFFSHORE ENERGY
73	NIG GASES SDN BHD
74	LEEDEN NOX SDN BHD
75	FAR EAST ENGINEERING SDN BHD

# SALES REFERENCES IN MALAYSIA

**No**

**Customers**

76

NGL TECH SDN BHD

77

MALAYSIAN MARINE AND HEAVY ENGINEERING

78

ASEAN SAINTIFIK SDN BHD

79

SUSHI ZANMAI MID VALLEY

80

ALAM MARITIM (M) SDN BHD

81

ISCOM (E) CONTROL SDN BHD

82

STEREO SDN BHD

# PRODUCTS

## MULTI-TYPE GAS DETECTOR



## EXPLOSION PROOF AUTO SAMPLING GAS DETECTOR



## AUTO SAMPLING GAS DETECTOR



# PRODUCTS

**GAS DETECTOR WITH DISPLAY**



**IR TYPE GAS DETECTOR**



**GAS DETECTOR RECEIVER**



# PRODUCTS

## GAS SAMPLING SYSTEM



## GAS DETECTOR MODELS





# PRODUCTS

## FLAMMABLE GAS DETECTORS



GTD-5000F Ex

GTD-3000Ex

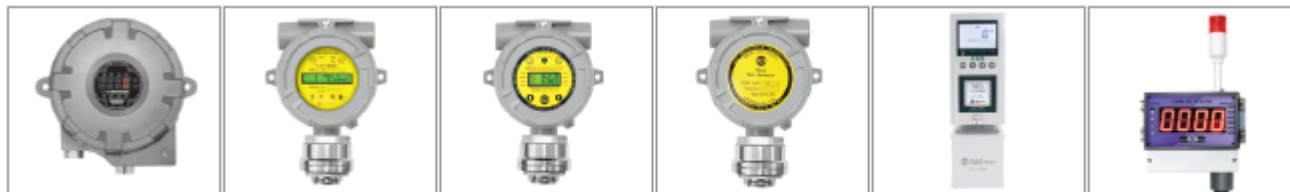
GTD-2000Ex

GTD-1000Ex

GTD-5000Ex

GTD-6000Ex

## TOXIC GAS DETECTORS



GTD-5000F Tx

GTD-3000Tx

GTD-2000Tx

GTD-1000Tx

GTD-5000Tx

GTD-6000Tx



# PRODUCTS

## VOC GAS DETECTORS



GTD-5000F VOC GTD-2000VOC GTD-5000VOC

## IR TYPE GAS DETECTORS



GIR-3000 GTD-5000F IR GIR-3000A

## GAS DETECTOR RECEIVER UNITS



GTC-200A GTC-200F GTC-540/550 GTC-520F GMS-2000



# PRODUCTS

## DOD TECHNOLOGIES

(US)

### COLORIMETRIC TYPE (PPB) GAS DETECTORS



DOD64 FTIR

ChemLogic 96

ChemLogic 8

ChemLogic 1  
(Z-Purge & Vortex Heater/Cooler)

ChemLogic 2

ChemLogic 1

CLPX

## INDUSTRIAL SCIENTIFIC (US)

### PORTABLE GAS DETECTORS



T40 Rattler

TANGO TX1

GasBadge Pro

Ventis MX4

MX6 iBrid

BM25



# BUSINESS PARTNERS

## SPECTREX (US)

### FLAME DETECTORS



## E2S (UK)

### BEACON / SOUNDER / MANUAL CALL POINT



# BUSINESS PARTNERS

## OPGAL (ISRAEL)

### GAS DETECTING CAMERA / THERMO CAMERA



EyeCGas

Therm-App

## RAMCO (US)

### ACID LEAK DETECTION PAINT / SAFETY SHIELD



Acid Leak  
Detection Paint

Safety Shield



# BUSINESS PARTNERS

ACD (US)

PORTABLE CALIBRATION TOXIC GAS  
GENERATOR



CAL 2000  
Generating H<sub>2</sub>S, Cl<sub>2</sub>, HCN, etc.



Genie series  
Generating O<sub>3</sub>, NH<sub>3</sub>, etc.



# Products Line

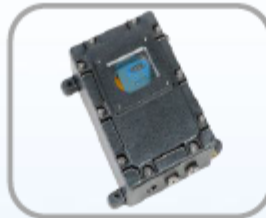
## INDUSTRIAL FIXED TYPE GAS DETECTOR



GIR-3000



GTD-5000



TS-4100P



GTD-3000Ex



GTD-2000Ex



GTD-1000Ex



GTD-3000Tx



GTD-2000Tx



GTD-1000Tx

- Flameproof or non-flame proof structure
- Diffusion or suction type detection method
- Infrared, catalytic, thermal conductivity, CEC, hot-wire semiconductor cell
- Self diagnosis function with built-in Microprocessor
- Auto calibration with a magnet bar
- Transmitter & local display type
- 4-20mA analogue / RS-485 digital output
- HART Communication

# Products Line

## HOME GAS DETECTION SYSTEM



### GHD 100A

- Detect gas leak below explosion limit and alarms Inbuilt visible & audible alarms
- Generates on/off signal or dry relay contact for inter facing with gas monitoring system
- Approved by CE
- Small size and easy installation
- Could be connected to control unit and shut off valve for automatic shutdown in the event of gas leak
- Low price
- 3 years of life cycle
- Operates with 230v AC or 12V DC



# Products Line

## HOME GAS DETECTION SYSTEM



### GAS VALVE CONTROL UNIT GVC1000

ITEM	SPECIFICATION
Operation Power	AC230V 50.60Hz / 2.5W
Input Signal	DC12V
Output Signal	DC12V (GAS SHUT-OFF VALVE)
Operation Temp	-20°C ~ 50°C
Operation Humidity	10 ~ 95% RH (Non-Condensing)
Control Type	Time Control
Opening Status	Green Lamp ON
Closing Status	Yellow Lamp ON, Buzzer ON
Approval	CE approved
Dimension	76 (W) x 152 (H) x 50 (D) mm
Weight	400g



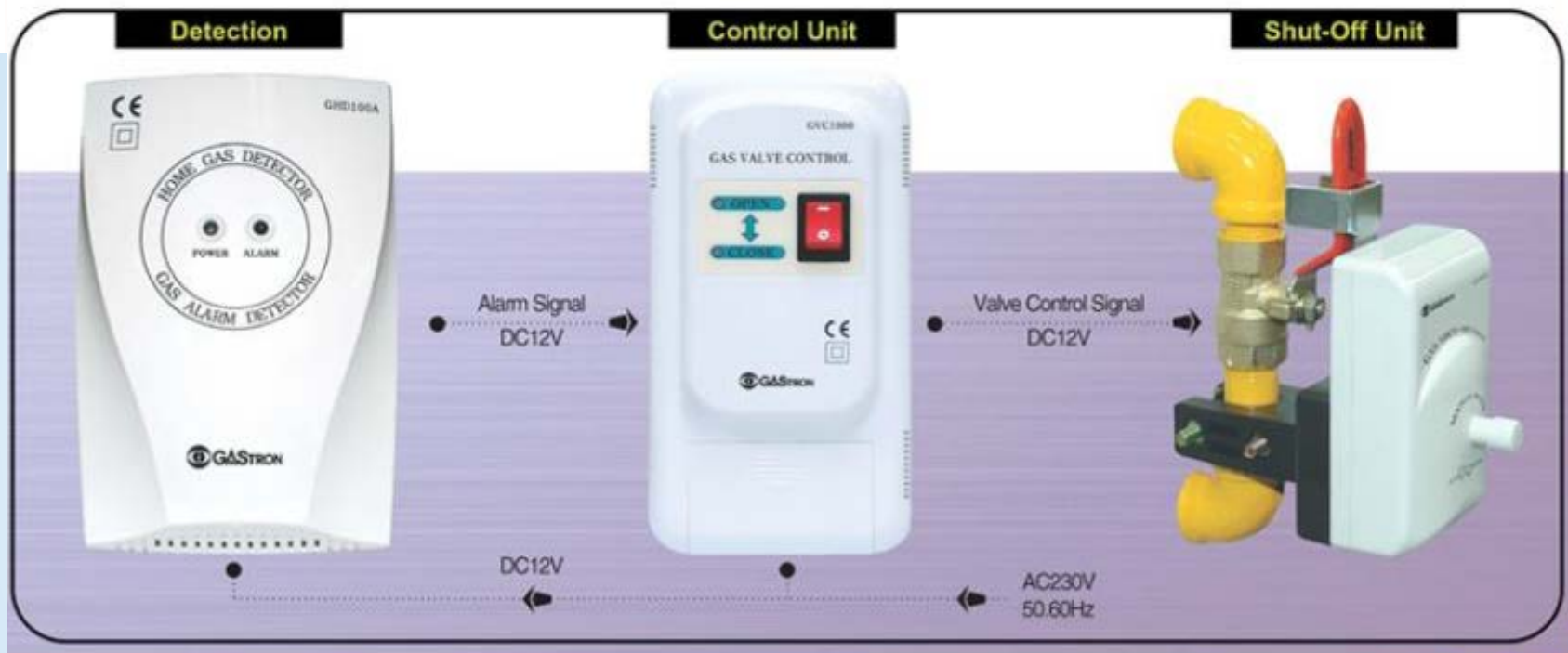
### GAS VALVE CONTROL UNIT GSV200A

ITEM	SPECIFICATION
Operation Power	DC12V / Max 1.5W
Open / Close Time	Less than 15sec
Open / Close Angle	90°
Operation Temp	-20°C ~ 75°C
Operation Humidity	10 ~ 95% RH (Non-Condensing)
Valve Type	Screw Type (Ball Valve)
Power Cut Off Time	Limit Switch ON / OFF Type
Case Material	ABS
Gear Material	Acetal
Size	Pipe 15A, 20A, 25A
Approval	CE approved
Dimension	134 (W) x 141 (H) x 70 (D) mm
Weight	350g

# Products Line

## HOME GAS DETECTION SYSTEM

### SYSTEM OVERVIEW



# Products Line

## Sampling Type Portable Gas Detector GPD-100



- EASY TO CARRY WITH LIGHT WEIGHT.
- GOOD A GRIP WITH A SIMPLE AND EDGE EXTERIOR
- EASY TO REPLACE A SENSOR WITH A CARTRIDGE TYPE
- AN USER ORIENTED DISPLAY & OPERATION KEYS
- NOTICEABLE DISPLAY WITH 3 COLORED LCD
- POINT DETECTION OF COMBUSTIBLE, TOXIC, O2 GASES
- 10 HOURS EVENT MEMORY FOR 10 HOURS WITH SD CARD
- PC INTERFACE WITH USB
- DATA INFORMATION BY WINDOW VIEWER
- RECHARGEABLE LI-ION BATTERY

# Products Line

## INTEGRATED GAS DETECTOR CONTROLLER



GTC-200A



GTC-520A



GTC-520F



GTC-540



GMS-1000

- Flameproof or non-flame proof structure
- Compatible connection with various type gas detectors
- Single or multi-channel receivers
- 3-alarm stage, 1-trouble relay contact (SPDT)
- Indication Bar-graph LED & Buzzer
- Single Alarm monitor with a warning light
- RS-485 or Modbus communication
- Self diagnosis
- Back-up power

# Products Line

**SPECIAL TYPE GAS DETECTION SYSTEM : Insert Type Gas Detectors**



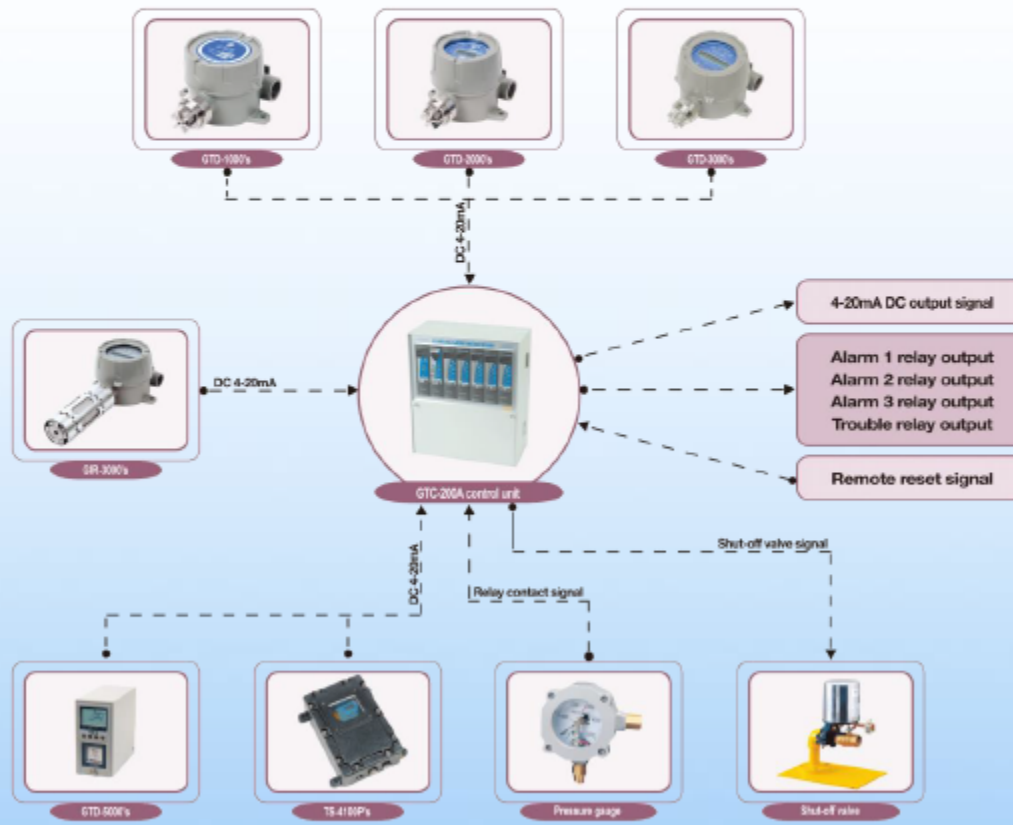
# Products Line

**SPECIAL TYPE GAS DETECTION SYSTEM : Sampling Type Gas Detectors**



# Monitoring Systems

## 1. Gas Detector <-> Receiver

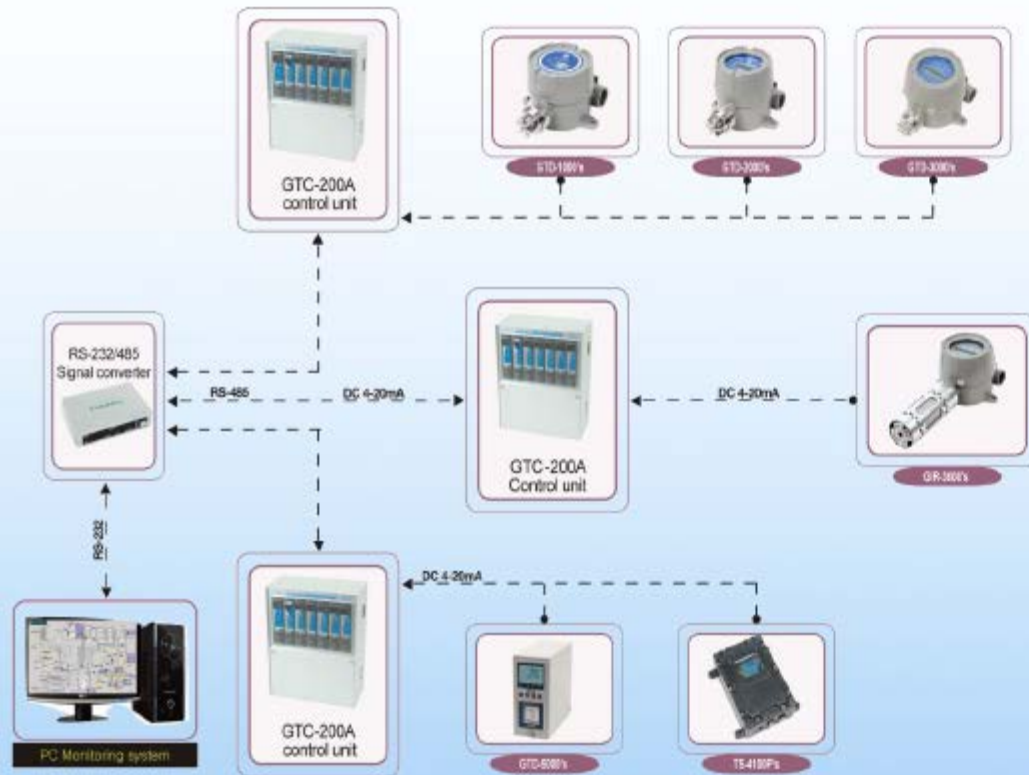


- This configuration is the most widely used type in industrial plants and each gas detector is connected with a control unit.

- The control unit receives 4-20mA DC signal from a gas detector and shows operating condition and gas leakage

# Monitoring Systems

## 2. Gas Detector <-> Receiver <-> PC Monitoring System



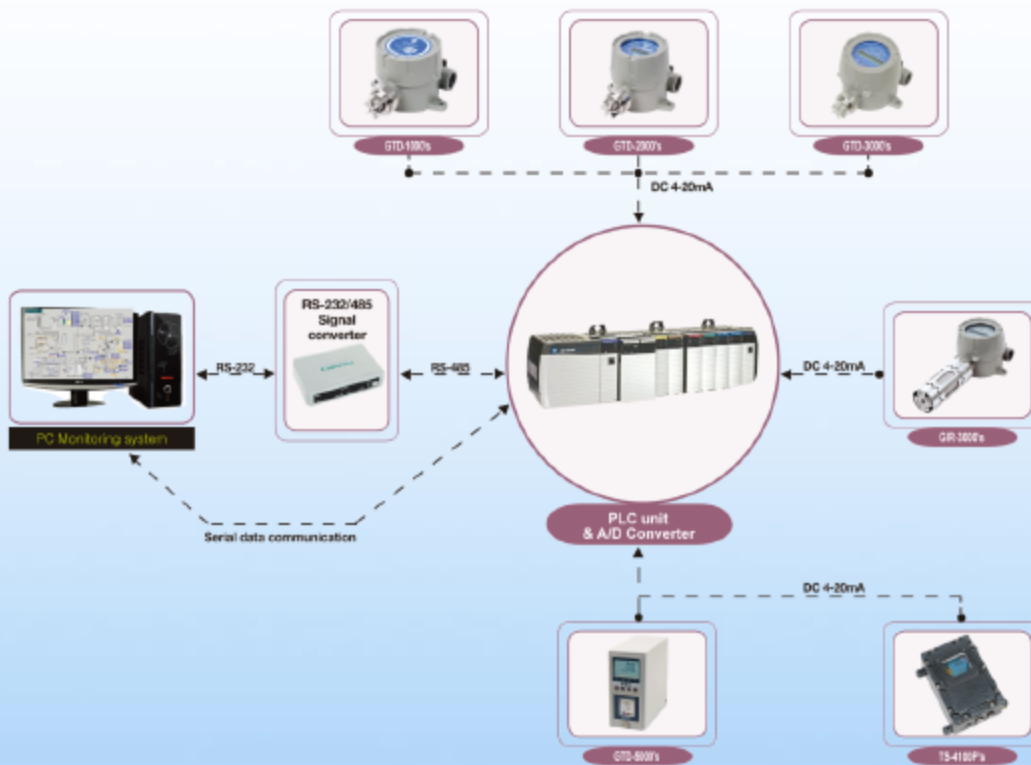
- This configuration is PC monitoring system which possible to be checked operating condition of gas detectors and gas leakage on PC screen at a look.





# Monitoring Systems

## 3. Gas Detector <-> PLC & Signal Converter <-> PC Monitoring System

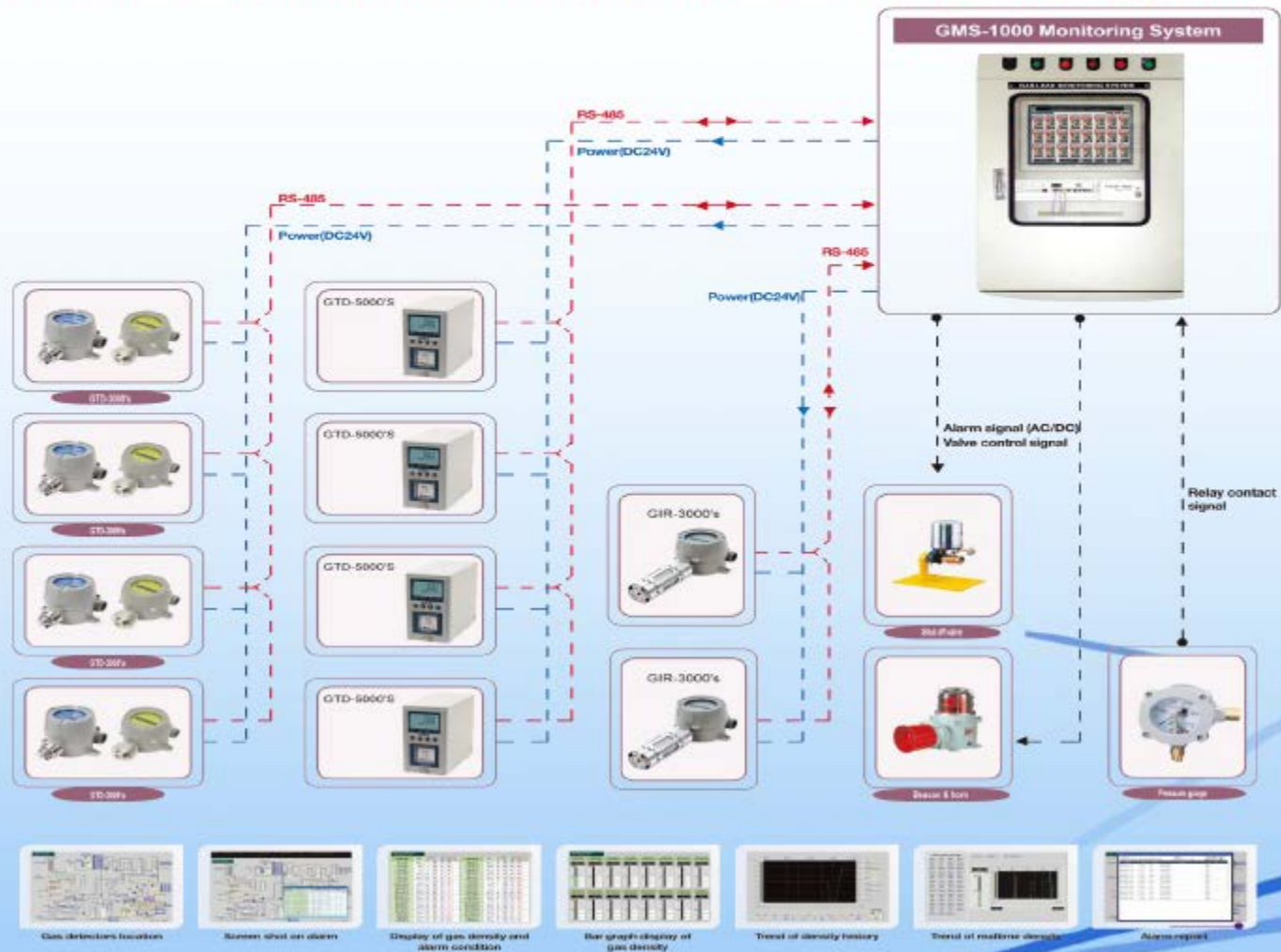


- This configuration is PC monitoring system and each gas detector is connected to PLC. PLC converts analog signal to digital signal and sends them for PC to show operating condition of gas detectors and gas leakage at a look



# Monitoring Systems

## 4. Gas Detector <-> Serial Data Communication <-> PC Monitoring System



# 6. Q & A





Gastronic (M'sia) Sdn Bhd

6 Jalan PJU 1A/13, Taman Perindustrian Jaya,  
Ara Damansara, 47200 Petaling Jaya,  
Selangor D.E., Malaysia.

Mobile - +6 012 300 2064 (KIM YUNG MIN)

Tel – 603 – 7840 0199

Fax – 603 – 7840 0411

e-mail – [klhakim@hotmail.com](mailto:klhakim@hotmail.com)

website – [www.gastron.com.my](http://www.gastron.com.my)