BIONICS INSTRUMENT CO.,LTD

List of Detectable Gases							
Target Gas			Range (ppm)			TLV-TWA (ACGIH)	Remarks
Name	Chemical Formula	System No.	Low	Standard	High	(ppm)	
Chlorine	Cl_2	100	0.3	1.5	10	0.5	
Hydrogen Sulfide	H_2S	200	0.3	30	200	1	
Hydrogen Cyanide	HCN	300	3	15	100	C 4.7	
Hydrogen Chloride	HCl	400		6	15	C 2	
Sulfur Dioxide	SO_2	500		6	15	0.25 (STEL)	
Phosgene	$COCl_2$	600		5		0.1	
Hydrogen Fluoride	HF	700		9		0.5	
Ozone	O_3	800	0.3	1	3	0.1	
Bromine/Iodine	Br_2/I_2	900	0.3	3	10		$Br_2$0.1ppm, I_2 0.01ppm
Oxygen	O_2	1100	5%	25%	50%	-	
Carbon Monoxide	CO	1200	50	75	1000	25	
Fluorine	F_2	1400	1	3	10	1	
Chlorine Trifluoride	ClF_3	1400		0.3		C 0.1	
Hydrogen	H_2	1500	1000	4000	4%	-	
Acetic Acid	CH_3COOH	1600		30		10	
Nitrogen Dioxide	NO_2	1700		9		3	
Nitric Oxide	NO	1700		100		25	
Methanol	CH_3OH	2100		600		200	
Ethanol	C_2H_5OH	2100		1000		1000(STEL)	
Isopropyl Alcohol	$CH_3CH(OH)CH_3$	2100		600	1000	200	
				2%			NDIR Sensor
Ethylene Oxide	C_2H_4O	2200		150		1	
Combustible Gas	CH_4 etc.	2300	100%LEL			-	
Ammonia	NH_3	2400		75	200	25	
Dimethyl Amine	$(CH_3)_2NH$	2400		30		5	
Hydrazine	N_2H_4	2500		1		0.01	
TDMAT	$Ti[(CH_3)_2N]_4$	2500		1		-	
TEOS	$Si(C_2H_5O)_4$	3000		30		10	
Gen. Acid.	-	3100	- depends on Gas -			-	
Hydrogen Selenide	H_2Se	3200	0.2	1		0.05	
H.C./VOC	-	3300	- depends on Gas -			-	
Chloride	-	3400	- depends on Gas -			-	
Fluoride	-	3700	- depends on Gas -			-	
Hydride	-	4000	- depends on Gas -			-	for Dry Scrubber
Nitrogen Trifluoride	NF_3	4100		30		10	
Chlorinated Hydrocarbons	-	4300	- depends on Gas -			-	
Methyl Bromide/Methyl Iodide	CH_3Br/CH_3I	4400		50	150		CH_3Br 1ppm, CH_3I 2ppm
Sulfur Hexafluoride	SF_6	4500		200	1500	1000	
				300	5000		NDIR Sensor
Nitrous Oxide	N_2O	4600		300		50	NDIR Sensor
CFCs	-	4700	- depends on Gas -			-	

Tetrafluoromethane	CF_4	4700		500	5000	-	NDIR Sensor
Acrylonitrile	CH_2=CHCN	4900		60		2	
Silane	SiH_4	5000	1	15		5	
Phosphine	PH_3	5000		1		0.3	
Arsine	AsH_3	5000		0.2		0.005	
Germane	GeH_4	5000		0.6		0.2	
Trimethyl Silane	$(CH_3)_3SiH$	5000		15		-	
Monomethyl Silane	CH_3SiH_3	5000		15		-	
H.C.	-	5300	- depends on Gas -			-	Heated Semiconductor sensor