



## MILLENNIUM II

**H2S**



**: S 321X-100-ASSY**

ISO 9001:2000



: MAN-0090 . 0  
2008 .

---

Monitoring Inc.

Net Safety

Monitoring Inc.

, Net Safety Monitoring Inc.

Net Safety

Net Safety Monitoring Inc.

Net Safety Monitoring Inc.

24

, Net Safety Monitoring Inc.

Net Safety Monitoring Inc.

Net Safety Monitoring Inc.

www.net-safety.com

Net Safety Monitoring Incorporated  
Corporate Headquarters  
2721 Hopewell Place NE  
Calgary, AB Canada T1Y 7J7

: (403) 219-0688

: (403) 219-0694

E-mail: [info@net-safety.com](mailto:info@net-safety.com)

- : www.net-safety.com

	.....	<b>5</b>
	.....	5
	.....	5
	.....	6
<b>1.</b>	.....	<b>8</b>
1.1	.....	8
1.2	.....	8
1.3	.....	8
<b>2.</b>	.....	<b>9</b>
2.1	.....	9
2.2	.....	9
2.3	.....	9
2.3.1	.....	9
	.....	9
2.3.2	.....	10
<b>3.</b>	.....	<b>10</b>
3.1	.....	10
3.2	.....	10
3.3	.....	10
<b>4.</b>	.....	<b>11</b>
4.1	.....	11
4.1.1	.....	11
4.1.2	Modbus .....	11
<b>5.</b>	.....	<b>12</b>
5.1	.....	12
5.1.1	Millennium II Basic .....	12
5.1.2	Millennium II .....	13
5.1.3	.....	15
5.2	.....	15
5.3	.....	16
5.4	/ .....	16
5.5	.....	17
	.....	<b>18</b>

A:	,	(ESD).....	18
B:		.....	19
:	H2S	Millennium II .....	20

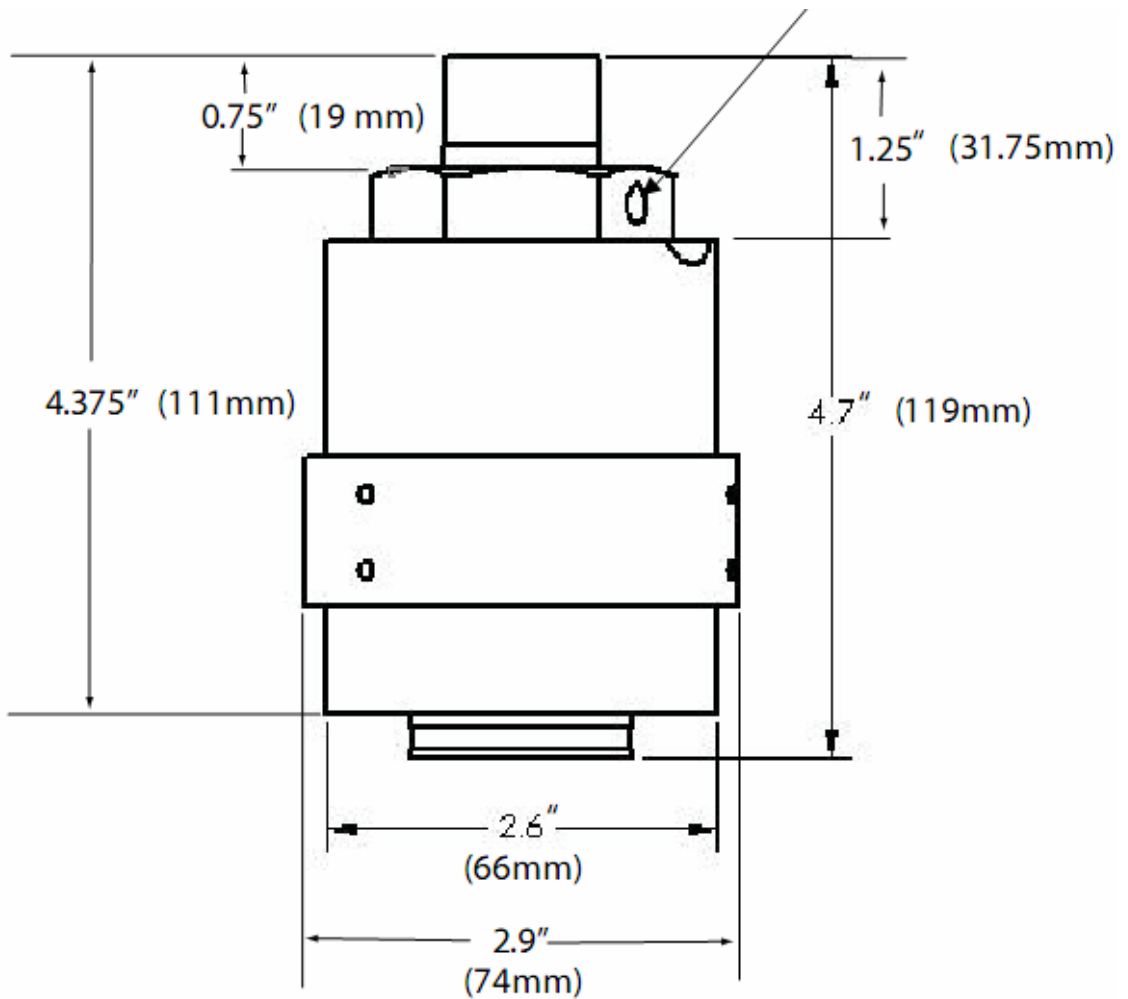
Millennium II.

« »

Millennium II.

« »

1: (mm).



Basic

Millennium II

Millennium II  
(AL)

1: Millennium II ( ) ( ) ( )

Millennium II	A		B		C		D		E		F		G		H	
(AL)	6.3	160	5.6	142	5.4	137	9.7	246	6.0	152	5.7	145	2.6	66	2.9	74
( )	5.9	150	5.9	130	4.6	117	8.9	226	6.0	152	5.8	147	2.6	66	2.9	74

2: Millennium II Basic ( J) ( ) ( )

Millennium II Basic	A		B		C		D		E		F		G		H	
(AL)	4.8	122	3.6	91	3.6	91	4.8	122	5.1	130	0.3	7.6	2.6	66	2.9	74
( )	4.7	119	3.6	91	3.6	91	4.7	119	5.1	130	0.3	7.6	2.6	66	2.9	74

2( )

Millennium II Basic	I		J	
	3.0	76	9.0	229
	2.8	71	8.9	226

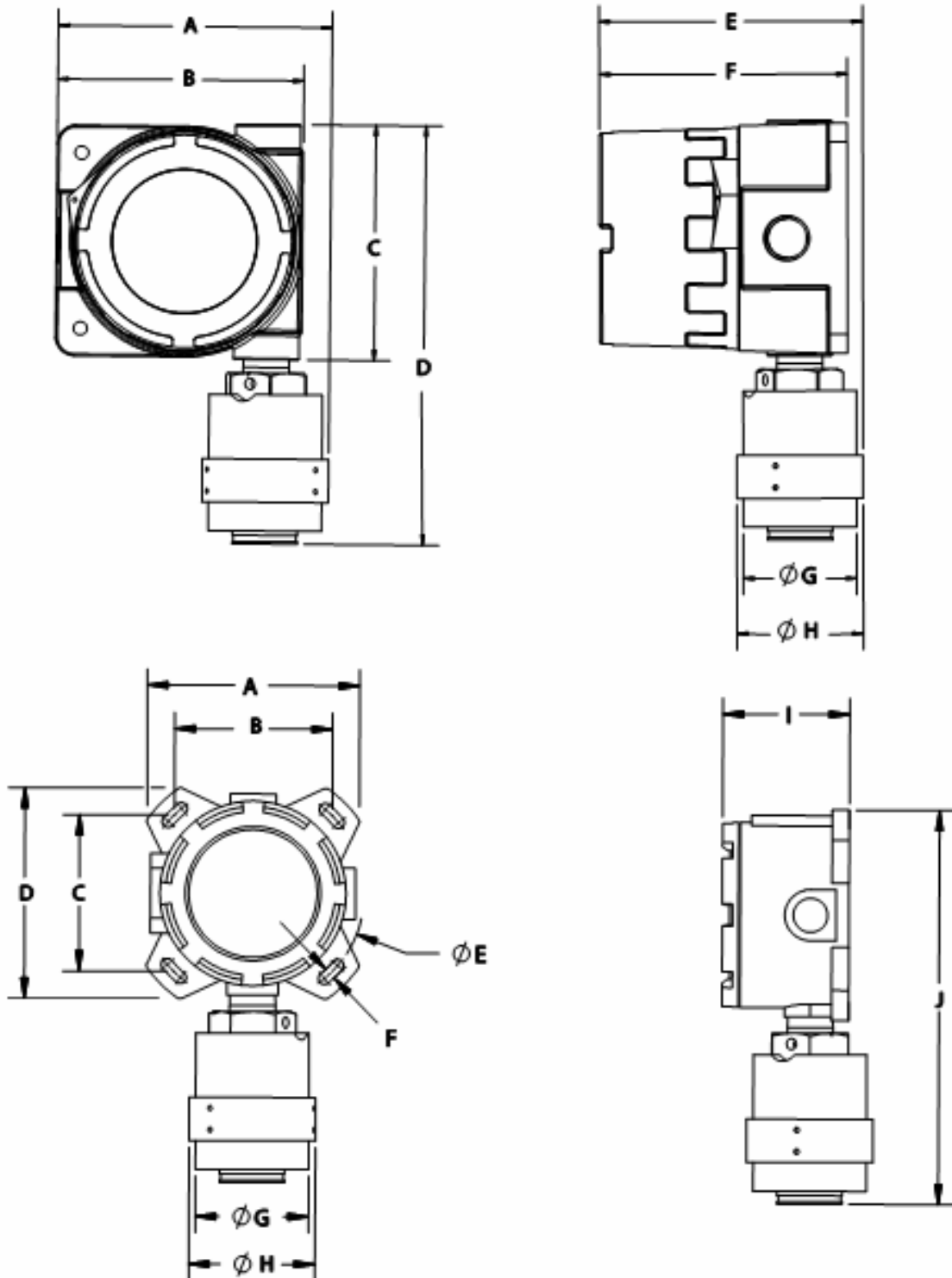
Basic 2

Millennium II

Millennium II

2:

Millennium II



# 1.

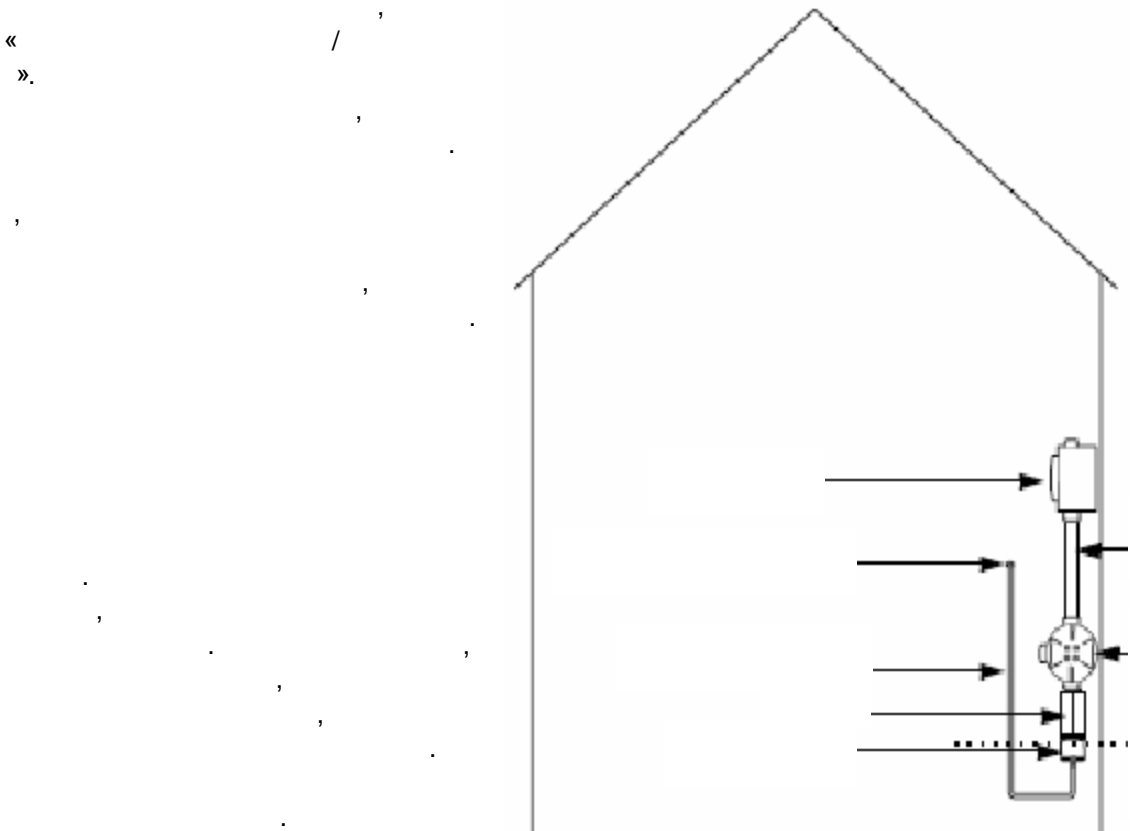
## 1.1

- 
- 
- 
- 
- 
- 

## 1.2

## 1.3

3:



**2.**

**2.1**

Net Safety Monitoring.

**2.2**

3/4"

**2.3**

**2.1**



85°C.

5°C

ATEX

IEC 61000-1, IEC 61000-4 EMI MIL-W16878D  
B/N.

« ».

16AWG

( B).

610

1.

3/4"

**2.3.2**



).

(

,

,



«

,

(ESD)».

3.

**3.**

**Millennium II**

		+Vdc	SigA	SigB	COM	Shld
		10.,5-32			/	

:

Net

Safety  
(MAN-0081).

**3.**

**3.1**

dip-

Millennium II Basic

Millennium II

Millennium.

**3.2**

12 15

Millennium II.

**3.3**

ST321

Millennium

II.

Millennium II.

dip-

**4:**

**4.1**

Millennium II

**4.1.1**

Millennium  
RS 485 Modbus (RTU) : HART.  
Millennium II.

**4.1.2 Modbus**

4 Modbus,

**4: Modbus**

40001		X	
40002		X	
40003		X	
40027			
40101			X
40102			X
40104			X

\* : Millennium Basic «1» 40102  
«1» 40104

5.

5.1

Millennium II Basic Millennium II

3 (90 )

5.1.1

Millennium II Basic.

H<sub>2</sub>S  
DIP- 2 « »  
H<sub>2</sub>S  
DIP- 2, H<sub>2</sub>S. 5  
H<sub>2</sub>S, /  
50%  
Dip- 1 H<sub>2</sub>S 20 ppm, 2, 3 4 100 ppm,  
1 (20ppm), H<sub>2</sub>S. 5 10 ppm

5: / DIP- 2

Dip- 2				
1	2	3	4	( )
.	.	.	.	( )
.	.	.	.	1 (20 ppm)
.	.	.	.	2 (50 ppm)
.	.	.	.	3 (100 ppm)
.	.	.	.	4 ( )
.	.	.	.	5 ( )

1. , ( / LED
2. : ( ).
3. ( , )
4. « » ( 15 , LED ( ).  
« » « »

5. 3 A ( ), LED ( ),
6. : 0,5
7. 3,3 A ( ), LED (50% ).
8. 0,5
9. (1,0 ), 3,6 A ( ), LED
10. ( )
11. Millennium II Basic 50% ( ) HART HART Millennium II Basic (MAN-0082).

**5.1.2**

**Millenium II**

- Millennium II
- 50% 10- 60% 40-60% 'cal. gas value' ( MAN-0076. ) 'sensor upper limit' ( )
1. "enter main menu "yes"( ). 1 ( 1)
  2. "Sensor Upper Limit (Range) ( 1) ( ) 2 2),
  3. ( 3 3).
  4. 1, ( ), 1 ( 3 3), 2 2), ( 3 3)
  5. « » « » ( 1 2 1 2). :

- « » « » , , ,
6. ( 3 3).
  7. "Exit" ,
  - ( ) / (cal.gas value) ,
  1. "enter Main menu" ( ) , "yes"( ) 1( 1)
  2. "Calibrate Sensor?" ( ?), ( 3 3).
  3. "Calibrate Sensor #1?" ( 1?), ( 3 3),
  4. "Calibrate Sensor #2?" 2, ( 2 2)
  5. (1 2), ( 3 3).
  6. "YES" ( 1 1)
  7. "Apply Clean Air" ( ). "Z & Span" , ( 1 1), "Setting zero" ( ).
  8. 50% ( % )
  9. "Spanning" ( ).
  10. "Remove Cal Gas".
  11. "Cal Complete".
  12. ( )

HART.

### 5.1.3

ppm H<sub>2</sub>S, 10 ppm H<sub>2</sub>S, 50 ppm, 100 ppm, 3 ppm H<sub>2</sub>S, 1000 ppm  
20

### 5.2

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

5.3

/

Net Safety

5.4

/

6.

	Net Safety
/	CCS-1
	JB-MPNS-A ( ), JB-MPNS-S ( 316)
	DSC-1
H2S	S 321-100

5.5

Authorization number). (Material Return  
(403) 219-0688 Net Safety Monitoring

- 1. ( Net Safety).
- 2. ,
- 3. ,
- 4. - ,
- 5. : Net Safety Monitoring Inc., 2721 Hopewell Place NE,  
Calgary, Alberta, Canada, T1Y 7J7
- 6. : RETURN for REPAIR ( ).
- 7. : Equipment being returned  
for repair. All charges to be billed to the sender ( , )

1-4,

(ESD) A: ,

:

!

—

:

- 
- 
- 
- 
- 
- 






**B.**

( )	AWG #20	AWG#18	AWG#16	AWG#14	AWG#12	AWG#10	AWG#8
30.5	1.02	0.64	0.40	0.25	0.16	0.10	0.06
61	2.03	1.28	0.80	0.51	0.32	0.20	0.13
91.5	3.05	1.92	1.20	0.76	0.48	0.30	0.19
122	4.06	2.55	1.61	1.01	0.64	0.40	0.25
152.5	5.08	3.20	2.01	1.26	0.79	0.50	0.31
183	6.09	3.83	2.41	1.52	0.95	0.60	0.38
213.5	7.11	4.47	2.81	1.77	1.11	0.70	0.44
244	8.12	5.11	3.21	2.02	1.27	0.80	0.50
274.5	9.14	5.75	3.61	2.27	1.43	0.90	0.57
305	10.20	6.39	4.02	2.53	1.59	1.09	0.63
381	12.70	7.99	5.03	3.16	1.99	1.25	0.79
457.5	15.20	9.58	6.02	3.79	2.38	1.50	0.94
534	17.80	11.20	7.03	4.42	2.78	1.75	1.10
610	20.30	12.80	8.03	5.05	3.18	2.00	1.26
686	22.80	14.40	9.03	5.68	3.57	2.25	1.41
762.5	25.40	16.00	10.00	6.31	3.97	2.50	1.57
915	30.50	19.20	12.00	7.58	4.76	3.00	1.88
1067.5	35.50	22.40	14.10	8.84	5.56	3.50	2.21
1220	40.60	25.50	16.10	10.00	6.35	4.00	2.51
1372.5	45.70	28.70	18.10	11.40	7.15	4.50	2.82
1525	50.10	32.00	20.10	12.60	7.94	5.00	3.14
1677.5	55.80	35.10	22.10	13.91	8.73	5.50	3.46
1830	61.00	38.30	24.10	15.20	9.53	6.00	3.77
1982.5	66.00	41.50	26.10	16.40	10.30	6.50	4.08
2135	71.10	44.70	28.10	17.70	11.10	7.00	4.40
2287.5	76.10	47.90	30.10	19.00	12.00	7.49	4.71
2440	81.20	51.10	33.10	20.20	12.70	7.99	5.03
2745	91.40	57.50	36.10	22.70	14.30	8.99	5.65
3050	102.00	63.90	40.20	25.30	15.90	9.99	6.28

C:

H2S

Millennium II

H2S											
	<table border="1"> <thead> <tr> <th>50</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>T10 ≤ 2,0 .</td> <td>T10 ≤ 3,0 .</td> </tr> <tr> <td>T20 ≤ 2,8 .</td> <td>T50 ≤ 7,0 .</td> </tr> <tr> <td>T50 ≤ 7,0 .</td> <td>T90 ≤ 21,0 .</td> </tr> <tr> <td>T90 ≤ 22,0 .</td> <td></td> </tr> </tbody> </table>	50	100	T10 ≤ 2,0 .	T10 ≤ 3,0 .	T20 ≤ 2,8 .	T50 ≤ 7,0 .	T50 ≤ 7,0 .	T90 ≤ 21,0 .	T90 ≤ 22,0 .	
50	100										
T10 ≤ 2,0 .	T10 ≤ 3,0 .										
T20 ≤ 2,8 .	T50 ≤ 7,0 .										
T50 ≤ 7,0 .	T90 ≤ 21,0 .										
T90 ≤ 22,0 .											
	+/- 2ppm 5% , ,										
	2ppm 6										
	1ppm 5% , ,										
	: -40°C +65°C : -40°C +60°C										
	0 - 95%										
	316										
IP /NEMA	IP64 / NEMA 4X										
	600										
	 Class I, Div1, Grps BCD; Class I, Zone 1, AEx/Ex d IIB+H2, T5, IP64, Type 4X, +60°C. ISA-92.0.01 FM ATEX.  0575  II 2G, EEx d IIB+H2, T5, IP64 FM07 ATEX 0011X.										

---

Net Safety Monitoring Inc.  
2721 Hopewell Place NE, Calgary, AB Canada T1Y 7J7  
1-866-FIREGAS (347-3427). (403) 219-0688. (403) 219-0694  
<http://www.net-safety.com> [info@net-safety.com](mailto:info@net-safety.com)

[8:00 – 17:00]: (403) 769-6074; (403) 717-8219.  
: (403) 219-0694 Email: [productservices@net-safety.com](mailto:productservices@net-safety.com)  
[http://www.net-safety.com/service/product\\_services.html](http://www.net-safety.com/service/product_services.html)

