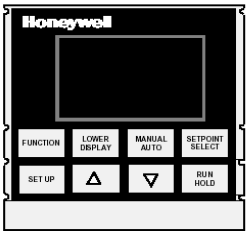
7866 Digital Gas Analyzer Thermal Conductivity Single Range

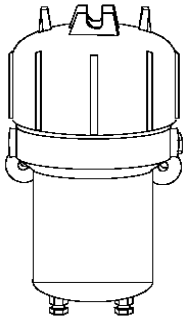
Model Selection Guide with Price Data

Model Selection Guide
51-52-16-78 Issue 3

Honeywell Proprietary

- **Utilizes thermal conductivity technology**
- **Measures:**
  - **% H_2 in air, N_2, CO_2 or O_2;**
  - **% CO_2 in air, N_2 or O_2**
  - **% O_2 in hydrogen**
  - **% He in air**
- **Analyzer includes Sensor, control unit and power supply**
- **See Prouct Spec 70-82-03-46 for further details**





Instructions

- Select the desired key number. The arrow to the right marks the selection available.
- Make one selection from Tables using the column below the proper arrow.
  A dot (•) denotes unrestricted availability.

Key Number [_ _ _ _ _ _ _] - **I** [_] - **II** [_] - **III** [_ _ _] - **IV** [_] - **V** [_ _ _ _ _ _] -

VI [_] - **VII** [_] - **VIII** [_ _ _]

List Price equals the sum of al prices for all selections made.

KEY NUMBER

Description	Selection	Availability				
7866 Digital Thermal Conductivity Gas Analyzer consisting of:	07866DO2	↓				
a) 07866DS2 Sensor Assembly (includes housing)						
b) 07866DC2 Digital Control Unit						
7866 Replacement Digital Control Unit Only	07866DC2		↓			
7866 Replacement Sensor Assembly - 2 Port *(Electronics Only)*	07866SS2			↓		
7866 Replacement Sensor Assembly - 4 Port (*Electronics Only)*	07866SS4				↓	

TABLE I - SENSOR POWER SUPPLY & LINE VOLTAGE

None	0		•	•	•	
Input Voltage 105 - 125 VAC, 50 - 400 Hz.	2	•	•			
Input Voltage 210 - 250 VAC, 47 - 520 Hz.	4	•	•			

TABLE II - OUTPUT (PV RANGE)

None	0		•	•	•	
0-20 mA	1	•	•			
4-20 mA	2	•	•			

TABLE III - COMMUNICATIONS	**Selection**	**07866DO2**	**07866DC2**	**07866SS2**	**07866SS4**	
None	000	•	•	•	•	
RS422/485/MODBUS	101	•	•			

TABLE IV - BACKGROUND GAS (Note: *On replacement control unit, selection must be same as selection on original unit)*

Air, N_2, CO_2, or O_2 where component being measured is % H_2	1	j	j	j	j	
Air, N_2, or O_2 where component being measured is % CO_2	2	k	k	k		
H_2 where component being measured is % O_2	4	l	l	l		
Air where component being measured is % He	5	m	m		m	

TABLE V - RANGE *(Note: On replacement control unit chassis selection must be the same as selection on original unit*

When measuring % H_2 in Air, N_2, or O_2; % H_2 @:						
0-1	001000	c	•	•		
0-2	002000	c	•	•		
0-5	005000	c	•	•		
0-10	010000	c	•	•		
0-15	015000	c	•	•		
0-20	020000	c	•	•		
0-30	030000	c	•	•		
0-75	575000	c	•	•		
0-100	503000	c	•	c		
50-100	103000	h	•		•	
80-100	080000	h	•		•	
85-100	516000	h	•		•	
90-100	506000	h	•		•	
95-100	095000	h	•		•	
98-100	098000	h	•		•	
60-80	515000	c	•	•		
40-80	548000	c	•	•		
45-55	514000	c	•	•		
20-50	050000	c	•	•		
When measuring % CO_2 in Air, N_2, or O_2; % CO_2 @:						
0-10	010000	c	•	•		
0-15	015000	c	•	•		
0-20	020000	c	•	•		
0-30	030000	c	•	•		
0-40	518000	c	•	•		
0-100	519000	c	•	•		
When measuring 0-100 % H_2 in CO_2	111000	c	•	•		
When measuring 70-100 % He in Air	510000	h	•		•	
When measuring 95-100 % O_2 in H_2	090000	c	•	•		
Special application: 0-75% dissociated ammonia	075000	c	•	c		

TABLE VI - SENSOR UNIT	**Selection**	0786 6DO2	0786 6DC2	0786 6SS2	0786 6SS4	
None	0		•			
Sealed Reference - 2 Port - Explosion Proof	3	•		•		
Flowing Reference - 4 Port - Explosion Proof	7	•			•	

TABLE VII - FACTORY USE ONLY

Reserved for Use by Fort Washington	0	•	•	•	•	

TABLE VIII - OPTIONS

None	000	•	•	•	•	
Linen Tags: 15 characters max. On each of three lines: Specify legend. One mounted on control unit; one on sensing unit	206	•	•	•	•	
Stainless Steel Tag: 15 characters max. On each of three lines: specify Specify legend. One mounted on control unit; one on sensing unit	208	•	•	•	•	

ACCESSORY PARTS

Description	**Part Number**
Replacement Power Supply - Input Voltage 105-125VAC, 50-400 Hz	51450915-501
Replacement Power Supply - Input Voltage 210 -250VAC, 47-520 Hz	51450915-502
DIN Adaptor Plate	30755223-002

Restrictions Letter	**Available Only With**		**Not Available With**	
	Table	**Selection**	**Table**	**Selection**
c	VI	3		
h	VI	7		
j			V	090000, 510000, 518000, 519000
k	V	010000, 015000, 020000, 030000 518000, 519000		
l	V	090000		
m	V	510000		

SELECTION GUIDE (Note 1)

Single % Range	Measurement Component	Background	Background Gas Code	Range	Sensing Unit
0-1	% H_2	Air or N_2 or O_2	1	001000	3
0-2				002000	
0-5				005000	
0-10				010000	
0-15				015000	
0-20				020000	
0-30				030000	
0-75				575000	
0-100				503000	
50-100				103000	7
80-100				080000	7
85-100				516000	7
90-100				506000	7
95-100				095000	7
98-100				098000	7
60-80				515000	3
40-80				548000	3
45-55				514000	3
20-50				050000	3
0-10	% CO_2	Air or N_2 or O_2	2	010000	3
0-15				015000	
0-20				020000	
0-30				030000	
0-40				518000	
0-100				519000	
0-100	% H_2	CO_2	1	111000	3
70-100	% He	Air	5	510000	7
95-100	% O_2	H_2	4	090000	3
0-75 dissociated ammonia	% H_2	N_2	1	075000	3
Triple Range: For hydrogren cooled generator applications, See GA-21 for pricing on 7866DHH2 and GA-3 for *Optional* 7872 Sampling System.					

NOTES:

1. This Selection Guide is included to assist in the model selection process for 7866 Digital Thermal Conductivity Gas Analyzers.