

**INSTRUMENT SPECIFICATION SHEET - ETHYLENE GAS MONITORS**

GENERAL DATA	1	INSTRUMENT TAG NUMBER			
	2	SERVICE			
	3	P&ID NUMBER			
	4	MANUFACTURER	<b>Detcon</b>		
	5	MATERIAL SOURCE			
	6				
	7				
PROCESS DATA	8	GAS(ES) TO BE DETECTED	<b>C2H4</b>		
	9				
	10	CONTAMINANT AND / OR CORROSIVE GASES			
SENSOR DATA	11	SENSOR TAG NUMBER			
	12	MODEL NUMBER	<b>DM-700-C2H4</b>		
	13	SENSOR TYPE	<b>Electrochemical Cell (intelligent plug-in) - NOTE 11</b>		
	14	NUMBER OF SENSORS	<b>1</b>		
	15	SENSOR/TRANSMITTER HOUSING MATERIAL	<b>Electropolished 316SS</b>		
	16	CALIBRATED RANGE	<b>0-100 PPM</b>		
TRANSMITTER	17	MODEL NUMBER	<b>DM-700-C2H4</b>		
	18	TRANSMITTER ELECTRONICS MODULE	<b>UNIVERSAL DESIGN - NOTE 12</b>		
	19	HOUSING NEMA (OR EQUIVALENT) RATING	<b>NEMA 7/4X</b>		
	20	ELECTRONICS ENVIRONMENTAL PROTECTION METHOD	<b>100% Epoxy Encapsulation</b>		
	21	SENSOR/TRANSMITTER HOUSING MATERIAL	<b>Electropolished 316SS</b>		
	22	TERMINAL JUNCTION BOX MATERIAL	<b>NOTE 1</b>		
	23	TERMINAL JUNCTION BOX CONDUIT CONNECTION	<b>3/4" NPTF - NOTE 8</b>		
	24	OUTPUT SIGNAL, RANGE mA	<b>4-20 mA DC - NOTE 9</b>		
	25	DIGITAL OUTPUT SIGNAL	<b>RS-485 Modbus RTU</b>		
	26	MAXIMUM 4-20 LOOP LOAD, OHMS (@ 24 VDC)	<b>1000 ohms</b>		
	27	4-20 OUTPUT SIGNAL, CABLE LENGTH (@ 24 VDC)	<b>1.29 mm wire = 33,000 m</b>		
	28	SENSOR REPLACEABLE UNDER POWER	<b>YES</b>		
	29	POWER SUPPLY	<b>10-30 VDC</b>		
	30	DIGITAL DISPLAY	<b>LED Alpha Numeric</b>		
CONTROLLER UNIT	31	CONTROL UNIT REQUIRED	<b>NO</b>		
	32	CONTROL UNIT TAG NUMBER			
	33	MODEL NUMBER			
	34	NUMBER OF CHANNELS			
	35	NUMBER OF MULTI-CHANNEL RACKS			
	36	LOCATION			
	37	MOUNTING			
	38	HOUSING NEMA (OR EQUIVALENT) RATING			
	39	POWER SUPPLY			
	40	INTEGRAL LOGIC AND LOOP POWER			
	41	WARNING ALARM: LATCHING / UNLATCHING			
	42	WARNING ALARM SETPOINT, IN MEASUREMENT UNITS			
	43	CRITICAL ALARM SETPOINT, IN MEASUREMENT UNITS			
	MISC	43	CRITICAL ALARM: LATCHING / UNLATCHING		
44		ELECTRICAL AREA CLASSIFICATION	<b>NRTL Class I Div.1 Group BCD ATEX Class I Zone 1 Group IIC</b>		

- 1) Standard Junction Box Offered as an Option: Electropolished 316 SS or Aluminum with epoxy paint finish
- 2) Warranty: Plug-in Sensor Element - 2 year, Intelligent Transmitter Module - 2 year
- 3) Operating Temp. -20°C to +50°C, Operating Humidity 15% to 90% RH non-condensing
- 4) Accuracy/Repeatability is +/- 2% of Full Scale
- 5) Response Time: T90 <140 seconds
- 6) Microprocessor-controlled, self-diagnostic transmitter electronics with full-script LED display
- 7) Pre-emptive fault diagnostics including input voltage, output signal, sensor integrity, transmitter integrity, operating temperature
- 8) Optional sizes on request: 20 mm or 1/2" NPT
- 9) 4-20 mA = 0-100% FS, 0 mA = Fault, 2 mA = In-Cal, 22 mA = Over-Range
- 10) Intrinsically-safe barrier design, no flame arrestor required, direct sample gas contact
- 11) Plug-in sensor contains smart digital interface, allows for seamless interchangeability between transmitter modules
- 12) Intelligent Transmitter Module is universal, adapts to any sensor type/range. Supports in-situ range change