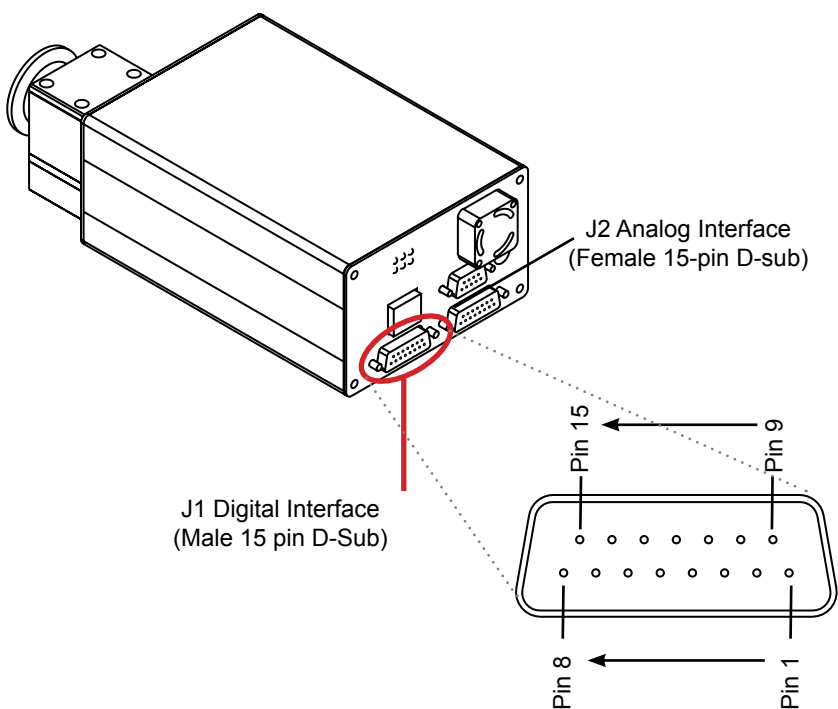


Verionix Gas Composition Sensor Digital I-O Interface Specifications

PN 910008R10 (January 2009)

**For All Verionix Gas Composition
Analyzers with Digital/Analog I-O Interface**



J1 Digital Interface Connector		
Pin #	Input or Output?	Signal
1		No Connection
2		No Connection
3	Output	User-defined (OD_3)
4	Output	User-defined (OD_1)
5	Input	User-defined (ID_0)
6	Input	User-defined (ID_2)
7		Connect to Digital Ground
8		Connect to Digital Ground
9		No Connection
10		No Connection
11	Output	User-defined (OD_2)
12	Output	User-defined (OD_0)
13	Input	User-defined (ID_1)
14	Input	User-defined (ID_3)
15		Connect to Digital Ground
ID_X = Digital Input X into Script		
OD_Y = Digital Output Y from Script		

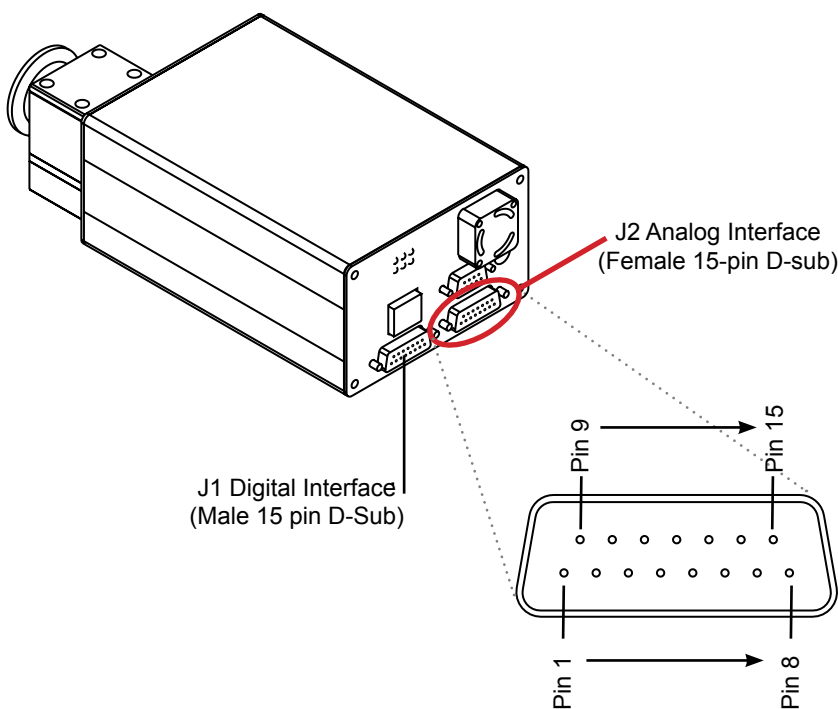
Specifications

Electrical:	4 TTL-compatible inputs (0 to 5 VDC, NO, with 1k-Ω internal impedance) 4 TTL-compatible outputs (0 or 5 VDC, NO, with 1k-Ω internal impedance) All signal lines and associated grounds are electrically isolated from the sensor and meet ESD and transient voltage requirements per IEC1000-4-2 & IEC1000-4-4.
Mechanical:	15-pin D-sub (Male) connector used on sensor. 15-pin D-sub (Female) mating connector required.
Software Interface:	Input signals ID_0 to ID_3 are readable by the sensor. Output signals OD_0 to OD_3 are set by the sensor.
Notes:	<ul style="list-style-type: none"> Connect all unused input signal lines to ground. Make no connection to unused output signal lines. To minimize noise, the Digital Interface Ground and the Analog Interface Grounds should be connected to separate external grounds.

Verionix Gas Composition Sensor Analog I-O Interface Specifications

P/N 910008R10 (January 2009)

For All Verionix Gas Composition Analyzers
with Digital/Analog I-O Interface



J2 Analog Interface Connector		
Pin #	Input or Output?	Signal
1		Connect to Analog Ground
2	Input	User-defined (IA_1)
3	Input	User-defined (IA_3)
4		Connect to Analog Ground
5	Output	User-defined (OA_3)
6	Output	User-defined (OA_2)
7	Output	User-defined (OA_0)
8		Connect to Analog Ground
9	Input	User-defined (IA_0)
10	Input	User-defined (IA_2)
11		Connect to Analog Ground
12		Connect to Analog Ground
13	Output	User-defined (OA_1)
14		No Connection
15		No Connection

IA_X = Analog Input X into Script
OA_Y = Analog Output Y from Script

Specifications

Electrical:	4 analog inputs (0 to 5 VDC, single-ended, 12-bits, ± 25 VDC overvoltage limit). 4 analog outputs (0 to 4.1 VDC, 12-bits, ~ 1 millivolt/bit). All signal lines and associated grounds are electrically isolated from the sensor and meet ESD and transient voltage requirements per IEC1000-4-2 & IEC1000-4-4.
Mechanical:	15-pin D-sub (Female) connector used on sensor. 15-pin D-sub (Male) mating connector required.
Software Interface:	Input signals IA_0 to IA_3 are readable by the sensor. Output signals OA_0 to OA_3 are set by the sensor.
Notes:	<ul style="list-style-type: none"> Analog outputs: Each sources/sinks ≤ 7.5 milliamp @ $< 1\Omega$ Output Impedance. Connect all unused input lines to ground. Make no connection to unused output signal lines. To minimize noise, the Digital Interface ground and the Analog Interface grounds should be connected to separate external grounds.