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Description

The VisConnect™ analog/digital communication module is intended to convert out signals from the ViSmart VS-2000 and VS-2500 series viscosity sensors into industry standard output formats and protocols including 4-20mA, 0-4V analog output and RS-232.

Features

- 2 channels of 4 – 20 mA output
- Each channel is loop powered and galvanically isolated
- Optional 2 channels analog voltage (0-4V) output
- Connect to any legacy DAQ system
- RS-232 Serial communication interface

Applications

- Printing:
 - Water Based Inks
 - Solvent Based Inks
- Industrial Lubricants

Performance Specifications

Parameter	Value
Electrical	
Power Supply Voltage (Vdc)	9 to 24
Power Supply Noise/Ripple (mVacpk_pk)	100 max
Power Supply Current (mA)	<100
Overvoltage Protection Circuit	Yes
Reverse Voltage Protection Circuit	Yes
Short Circuit Protection	Yes
Visible LED status information	Yes

Performance Specifications cont.

Parameter	Value
Output Option 1	
Number of outputs	2
Signal names	CH1 (Viscosity), CH2 (Temperature)
Output Current Range (mA)	4 to 20 (per channel)
Loop powered	External; 20 to 24; <u>Not included</u>
Load (Ohm)	500, max
Output Option 2	
Number of Outputs	2
Signal Names	CH1 (Viscosity), CH2 (Temperature)
Voltage Output Range (Vdc)	0 to 4 (per channel)
Maximum Load Current (mA)	5 (per channel)
Communications	
Digital interface to Sensor	Proprietary SPI
Serial communication to interface	RS232
Communication protocol	ASCII
RS232 Data Rate (kBaud)	9600
Environmental	
Operating temperature range (°C)	0 to 70
Storage temperature range (°C)	-25 to 85

Related Products

The VisConnect™ VC-1000 series communication modules integrates to:

- The ViSmart VS-2010 viscosity sensor with permanently affixed cable.
- The ViSmart VS-2510 viscosity sensor with detachable cable.

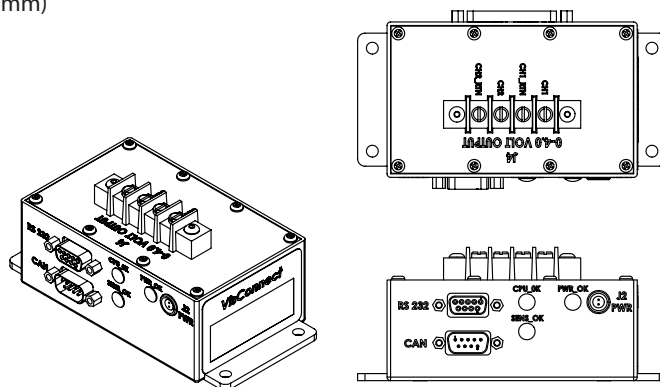
Model Number

Description

VC-1010	VisConnect providing 4-20mA output, RS-232. Includes flying lead and power supply.
VC-1015	VisConnect providing 4-20mA output, RS-232.
VC-1020	VisConnect providing 0-4V analog output. Includes flying lead and power supply.
VC-1025	VisConnect providing 0-4V analog output.

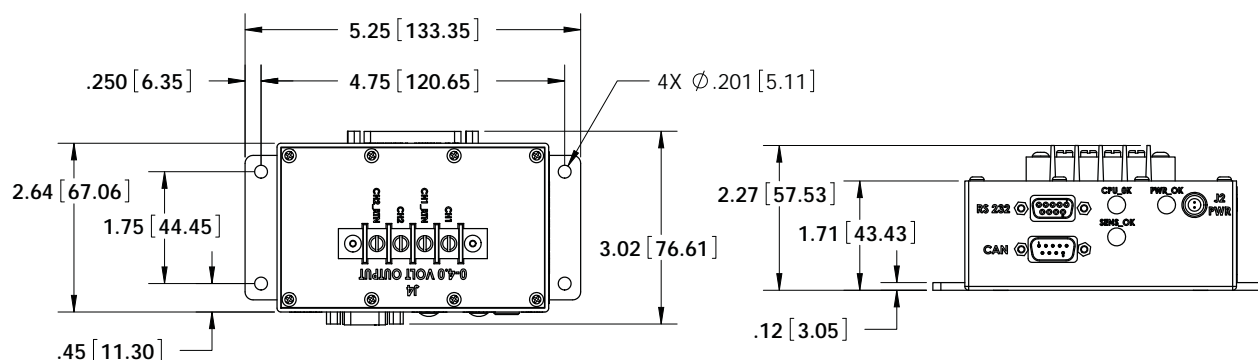
Mechanical Dimensions & Connections

5.25 x 2.64 inches (133.35 x 67.06 mm)



Physical Dimensions

Dimensions in inches (mm)



Pin Assignments

J1 SSI Connector: 25D connector - Female

Pin#	Name	Description
1	GND	Supply Voltage Return
2	GND	Supply Voltage Return
3	GND	Supply Voltage Return
4	GND	Supply Voltage Return
5	GND	Supply Voltage Return
6	GND	Supply Voltage Return
7	GND	Supply Voltage Return
8	GND	Supply Voltage Return
9	GND	Supply Voltage Return
10	GND	Supply Voltage Return
11	GND	Supply Voltage Return
12	GND	Supply Voltage Return
13	GND	Supply Voltage Return

Pin#	Name	Description
14	V+	5 - 10Vdc Supply input voltage
15	CS0	Chip select 0
16	IRQ	Interrupt request
17	CS2	Chip select 2
18	NC	No connection
19	RST	Reset
20	CS1	Chip select 1
21	PWREN	Power enable
22	SCK	Serial clock
23	MOSI	Master Out/Slave In
24	CSMEM	Memory chip select
25	MISO	Master In/Slave Out

J2 - Power Connector: Lemo EGG.0B.302.CLI two pins connector - Male Suitable cable mount plug Lemo FGG.0B.302.CLAD42

Pin#	Name	Description
1	V+	9 - 24 Vdc supply voltage
2	GND	Supply voltage return
---	SHLD	Cable shield connected to the connector housing

Pin Assignments cont.

J3 RS232 Connector: 9D connector - Female

Pin#	Name	Description
1	NC	No connection
2	RS232_TXS	Transmit data
3	RS232_RXS	Receive data
4	NC	No connection
5	GND	Supply Voltage Return
6	NC	No connection
7	NC	No connection
8	NC	No connection
9	NC	No connection

Pin Assignments

J4 Analog 4-20mA transmitter connector: 4-pin Terminal Block

Pin#	Name	Description
1	CH1	Channel 1 external supply voltage for the transmitter
2	CH1_RTN	Channel 1 external supply voltage return for the transmitter
3	CH2	Channel 2 external supply voltage for the transmitter
4	CH2_RTN	Channel 2 external supply voltage return for the transmitter

Optional J4 Analog voltage connector: 4-pin Terminal Block

Pin#	Name	Description
1	CH1	Channel 1 analog voltage output
2	CH1_RTN	Channel 1 return
3	CH2	Channel 2 analog voltage output
4	CH2_RTN	Channel 2 return

LED Indicators:

There are 3 LEDs for diagnostic purposes:

LED1	Power OK
LED2	CPU OK
LED3	Sensor Connected

Weight: Approximate weight (oz) 10

Product status and specifications are subject to change.

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