AANDERAA a xylem brand

TEST & SPECIFICATIONS

Form No. 860, March 2024

Product: Conductivity Sensor 5819C IW
Serial No: 385

1.	**Visual and Mechanical Checks:**	
1.1.	Soldering quality	☑
1.2.	Visual surface	☑
1.3.	Galvanic isolation between housing and electronics	☑
2.	**Current Drain and Voltages:**	
2.1.	RS232 average current drain at 0.5Hz sampling (max: 47mA)	38.7 mA
2.2.	RS422 average current drain at 0.5Hz sampling (max: 47mA)	NA mA
2.3.	RS232 peak current drain at 0.5Hz sampling (max. 100mA)	76 mA
2.4.	RS232 quiescent current drain (max: 150µA)	111 µA
2.5.	RS422 quiescent current drain (max: 1.7mA)	NA mA
2.6.	AiCaP average current drain at 0.5Hz sampling (max: 47mA)	38.4 mA
2.7.	AiCaP quiescent current drain (max: 150µA)	79 µA
2.8.	DSP voltage, (3.3 ±0.15V)	3.31 V
2.9.	DSP core voltage,(1.9 ±0.05V)	1.92 V
2.10.	Excitation driver voltage, (3.3 ±0.15V)	3.31 V
3.	**Electronic performance test:**	
3.1.	Average of Receiver readings (0 ±400mV)	158 mV
3.2.	Standard Deviation of Receiver readings (max: 60mV)	10 mV
3.3.	Cross-talk voltage with open loop (0 ±400mV)	-1 mV
3.4.	Amplification (ZAmp) with 0.2mS loop/5000 Ω (-1500 – -200)	-648 mV
3.5.	Reading (RawCond0.0) with open loop/0mS (200– 5000)	922 lsb
3.6.	Reading (RawCond0.7) with 14.286mS loop/70Ω (30000 – 60000)	38496 lsb
3.7.	CANBus Output test with 1 mS loop/1000	☑
4.	**Temperature cycling test:**	
4.1.	Temperature cycling test in chamber (0-50°C)	☑
5.	**Temperature test (2 – 35°C):**	
5.1.	Raw data temperature drift with 14.286mS loop/70Ω loop in High Range (max 900)	205 lsb
6.	**Pressure test (0 – 60MPa):**	
6.1.	Raw data drift with 14.286mS 70Ω loop in High Range (max 8)	☑

Date: 12 Apr 2024

Sign: Laila A. Skålnes

Laila Skålnes, Production Engineer

PRESSURE CERTIFICATE

Form No. 667, Sept 2009

Product: Conductivity Sensor 5819C IW
Serial No: 385
Date: 11.04.2024

Certificate No: 225383333385

This is to certify that this product has been pressure tested with the following instrument, and we confirm that no irregularities were found during the test:

Autoklav 800 bar – sn: 0210005

Pressure readings:

Pressure (Bar)	Pressure time (hour)
300	1

Date: 11 Apr 2024

Sign:
Laila A. Skålnes

Laila Skålnes, Production Engineer