

# Incyte Arc Expert - 420

Specification Sheet (Part/REF # 243950-0214)



Incyte Arc sensors enable real-time, in-situ measurement of viable cells, making it possible to detect events and respond in real time without increased off-line sampling.

## Product Specifications

<b>Sensor Family</b>	Incyte Arc Expert
<b>Parameter</b>	Viable Cell Density
<b>Sensor Output</b>	Arc: Modbus
<b>a-length</b>	420 mm
<b>Electrical Connector</b>	VP8
<b>Measurement Principle</b>	Permittivity
<b>Measuring Range</b>	0 to 700 pF/cm, equivalent to $5 \times 10^5$ to $8 \times 10^9$ cells/mL (mammalian)
<b>Temperature Sensor</b>	Yes
<b>Configurable Values</b>	VCD, Conductivity, Temperature
<b>Diameter</b>	12 mm
<b>Process Connection</b>	PG13,5
<b>Wetted Parts</b>	Platinum Stainless Steel 1.4435 PEEK (Polyetheretherketone) EPDM (Ethylene propylene elastomer)
<b>O-ring Material</b>	EPDM (Ethylene propylene elastomer)
<b>Surface Quality of Steel</b>	Ra < 0.4 $\mu$ m (N5)

<b>Digital Interface</b>	RS485 Modbus (max. 31 addresses)
<b>Baud Rate</b>	4800, 9600, 19200, 38400, 57600, 115200 bd
<b>Operating Voltage</b>	24 V ( $\pm 10\%$ )
<b>Serial Number</b>	Yes
<b>Certificate</b>	Yes
<b>Autoclavable</b>	Yes, max. Temperature 130 °C (Incyte Arc Revision 00) Yes, max. Temperature 140 °C (Incyte Arc Revision 01 and higher)
<b>CIP</b>	Yes
<b>Steam Sterilizable</b>	Yes, max. Temperature 140 °C
<b>Operating Temperature Range</b>	0 to 60 °C
<b>Conductivity Range</b>	1 to 80 mS/cm for firmware below CDCUM003 0.5 to 80 mS/cm for firmware CDCUM003 and above (with Hamilton calibration)
<b>Pressure Range bar g</b>	0 to 12 bar

Specifications are subject to change without notice

**Spec. Version D**

<https://www.hamiltoncompany.com/process-analytics/sensors/243950-0214>