

Phase Advanced Sensor Systems

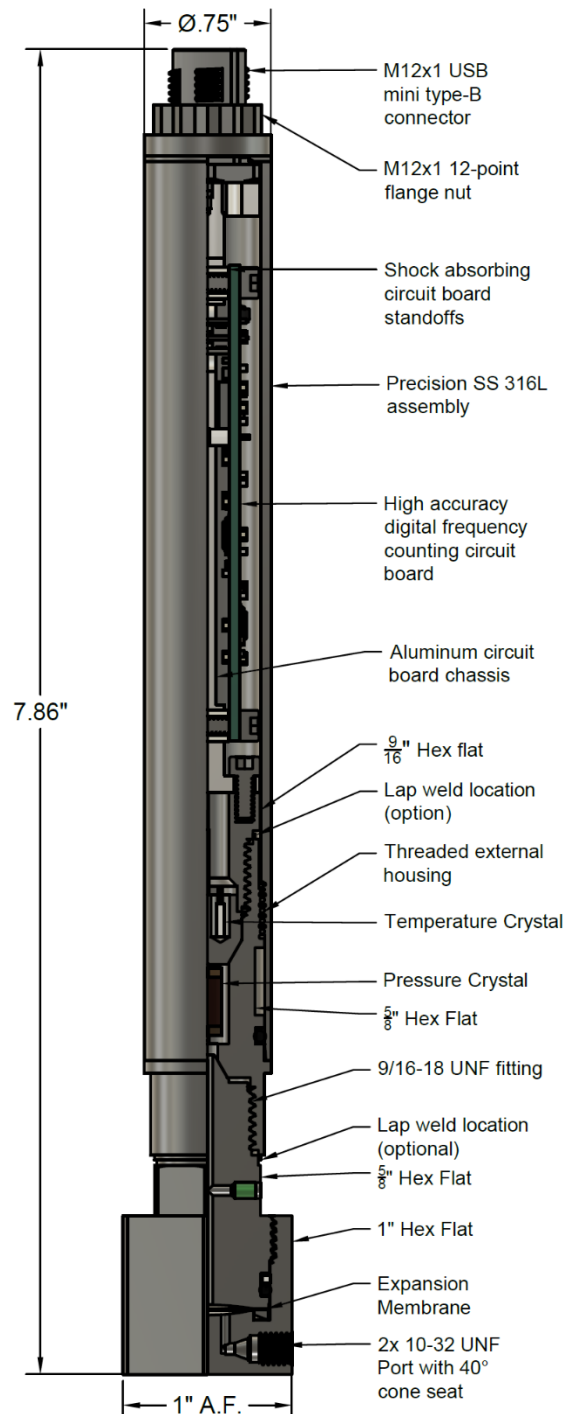
Passion reflected through design

Microfluidic XtalX Pressure Sensor

X-TI-7-0000-1111

0000: Pressure Rating

1111: Temperature Rating



SPECIFICATION HIGHLIGHTS

Pressure Range ----- 0 to 7500 psi (0 to 448 bar)
Temperature Range ----- -40° to 85°C
Pressure Accuracy ----- 0.01 %FS
Drift @ Max Temperature & Pressure ----- 0.02%FS/year
Temperature Accuracy ----- 0.01°C
Drift @ Max Temperature & Pressure ----- 0.01°C/year
Dead Volume-----0.2mL

MECHANICAL SPECIFICATIONS

Weight:

Height:

Maximum Width:

Proof Pressure:

ELECTRICAL SPECIFICATIONS

Maximum Voltage Ratings ----- -0.3 to 24V DC
Voltage Supply Range ----- 2.7 to 20V DC
Current Draw @ 25°C ----- 25mA
Current Draw @ FS Temp ----- 40mA
Output ----- USB 2.0
ESD ----- IEC 61000-4-2 ±15kV

OSCILLATOR SPECIFICATIONS

Nominal Reference Frequency ----- 170MHz ± 10ppm
Nominal Pressure Frequency ----- 52kHz ± 300Hz
Nominal Temperature Frequency ----- 262kHz ± 200Hz
See Reference Crystal Graph for Drift characteristics.

ADDITIONAL SPECIFICATIONS

Storage Temperature ----- -65° to 150°C
Achievable Resolution ----- 0.01 PSI
Repeatability ----- 0.01 %FS
Nominal Sensitivity ----- 3 PSI/Hz
Response time ----- 0.1S
Gravitational Effects ----- negligible
Orientational Effects ----- negligible
Acceleration Sensitivity ----- negligible
Startup time @ 25°C:-----1sec
Peak Inrush Current @ 25°C:-----25mA
Startup time @ FS Temp:-----3sec
Peak Inrush Current @ FS Temp:-----40mA