

Technical Specifications

The QSR1[®] Scanner is GUL's quantitative short range (QSR) device, designed to semi-automatically scan predefined sections of straight pipelines for corrosion under pipe supports (CUPS). The QSR1[®] provides a quantitative measure of the average wall, as well as the **minimum remaining wall thickness**.

TECHNICAL SPECIFICATION SUMMARY *(Subject to change)*



Application Areas	
Designed for	Inspecting contact supports without lifting the pipe.
Inspection Capabilities	
Pipe Diameter	6" to 24" (Nominal API 5L)
Pipe Wall Thickness	6 mm to 13 mm [0.236" to 0.512"]
Pipe Orientation	Horizontal ($\pm 15^\circ$)
Surface Preparation	Surface must be wiped clean of loose debris. Coatings thicker than 1 mm must be removed under the sensor.
Physical Characteristics	
ePOD Dimensions: W x D x H, Weight <i>(approx.)</i> ⁽¹⁾	25 x 25 x 9 cm [10 x 10 x 3.5 inches], < 4 kg [9 lbs]
Sensor Cart Dimensions W x D x H, Weight <i>(approx.)</i>	35 x 11 x 5 cm [14 x 4.5 x 2 inches], 3.45 kg [7.6 lbs]
Unit Weight <i>(approx.)</i>	12 kg [26.5 lbs]
Clearance	Varies according to diameter. ⁽²⁾
Software	
Controlling Software	WaveProQSR™
Analysis Method	Uses frequency based, patented, QSR quantitative analysis method.
Machine Learning Compatibility	To be supported in QSR Studio.
Communication Interfaces	
USB Link	USB 2.0 ⁽³⁾
LAN	10/100 Base-T Ethernet
Power Ratings	
Battery type (Removable)	6.6 Ah, 14.8 V Li-Ion
External power supply to charge instrument	18-20 VDC (60W min)

KIT COMPONENTS

- QSR1[®] Electronic POD (ePOD)
- Circumferential Transmitter Sensor Cart
- Circumferential Receiver Sensor Cart
- ePOD to Sensor Cables (Short & Long Sets)
- Available Frames Set: 6", 8", 10", 12", 14", 16", 18", 20", 24" ⁽⁴⁾
- USB Cable & Ethernet Cable
- ePOD Charger
- Rugged Packing/Transport Case

⁽¹⁾ Dimensions and Weight of the Electronic POD without frames, handles, or sensors.

⁽²⁾ Clearance only required on approximately half of the pipe circumference.

⁽³⁾ Instrument appears as a disk drive on the PC.

⁽⁴⁾ Frames are diameter specific.