Product Specification

STL Sensron Interrogator Unit (Integrated Computing and Optical Unit)

STL Sensron

STL Sensron is a **Distributed Acoustic Sensing (DAS)** interrogator unit. This advanced Fibre Optic sensing unit transforms standard optical fibre into a continuous, high-sensitivity acoustic/vibration sensor for real-time monitoring and detection over vast distances.

Specifications

Physical Characteristics	
Measurement Technology	Distributed Acoustic Sensing with Amplitude and Phase
Distance Range* (Per Channel)	40 km
Number of Channels	2
Standard Operating Wavelength	1550.2 nm
Standard Fibre Types	Single Mode Fibre (SMF): ITU-T G.652, G.654 or G.657
Maximum Fibre Attenuation	0.3 dB/ km
Maximum Acceptable Optical Loss Budget	12 dB /40km
Interrogation Rate	Up to 2500 Hz for 40km
Sampling Resolution (m)	0.2m | 0.4m | 0.8m | 1.2m | 1.6m | 2m
Spatial Resolution	Min:10m | Max:50m
Pulse Width	Min 100ns | Max: 500 ns
Power Supply (Dual Redundant Power Supply)	1. AC supply :110 to 240 VAC, 50 to 60 Hz 2. DC Supply: 48V DC
Power Consumption	Max 150 W
In Built Storage	4 TB
Network	TCP/IP
Interface Ports	2 x USB 3.2, 2 x USB 2.0, 1 x HDMI, 1 x 10G RJ45, 1 x 1G RJ45

Environmental	
Operating Temperature	- 5°C to 50°C
Storage Temperature	- 20°C to 70°C
Packaging	2.5U, 19-Inch Rack mountable
Dimension (W x D x H)	482.6 mm x 650 mm x 111 mm
Weight	18 Kg
Heat Control	Active Cooling
Ingress Protection	IP 50
Humidity of Controller	0 to 95% Non Condensing
Optical Connectors	SC/APC
TRIG IN/TRIG OUT	Synchronized Trigger In and out External Option
Display	16x2 LCD Display
Laser Safety	Class 1M

Software Features	
User Interface	Real-Time Monitoring of Data and Alerts
	Map View of the Deployed Perimeter/Route
	Location Based (Lat, Long) Alert Generation
	Zone Creation and Management
	Zone Status Information
	Alarm History with Date, Time and Location
Data visualization	Time vs Distance Waterfall Plot
Integration	REST API Integration
Application	Third Party Intrusion (TPI) Perimeter Security Fibre Monitoring Oil and Gas Pipeline Monitoring

02/032026

For additional information, please contact your sales representative.

You can also visit our website at **www.stl.tech**