
SUBSEA SALES AND ENGINEERING PTE. LTD.

Integrated Land, Air & Sea Technology Solutions

Advanced robotics, autonomous systems and AI-driven inspection —
engineered for underwater, terrestrial and aerial operations.

Featuring the SSAEPLPro CTD & TD Profiler Series

Marine | Land | Air | AI | Robotics enquiry@ssaepl.com



Who We Are

Engineering the future across every environment

Subsea Sales and Engineering Pte. Ltd. is a Singapore-based technology and engineering solutions provider delivering innovative products and integrated systems across the marine, land and air domains. We work with world-class technology partners to supply intelligent solutions that raise operational efficiency, safety and productivity.

Our expertise spans advanced robotics, autonomous systems, AI-powered inspection, digital transformation and full lifecycle engineering support for industries worldwide.

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Domains served
Sea, land and air

10+

Industries supported
Energy to academia

24/7

Technical support
Regional coverage



Why Choose SSAEPL

Eight reasons customers partner with us

Integrated across domains

One supplier for land, air and sea technology programmes.

Experienced engineering team

Applications, commissioning and field support specialists.

Advanced AI & robotics

Autonomy, computer vision and analytics built into delivery.

Regional Southeast Asia support

Local response times from our Singapore base.

Global technology partners

Strategic partnerships with leading equipment manufacturers.

Turnkey project delivery

From specification and supply to installation and handover.

After-sales service & training

Operator training, spares management and warranty support.

Innovation and quality focus

Committed to customer success over the asset lifecycle.

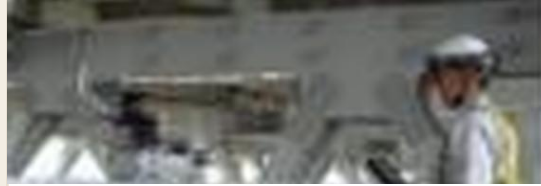
Technology Portfolio

Marine, land and air capability under one roof



Marine Technologies

- Work class ROV systems
- Inspection ROVs
- AUVs
- Hydrographic survey systems
- Underwater acoustics
- AI underwater inspection



Land Technologies

- Ground inspection robots
- Pipeline inspection systems
- AI vision detection
- Thermal imaging
- Infrastructure monitoring
- Smart city sensors, automation & digital twins



Air Technologies

- Industrial drones (UAVs)
- Aerial mapping & LiDAR survey
- Thermal drone inspection
- Powerline inspection
- Solar farm inspection
- Security surveillance & emergency response

AI & Digital Technologies

A cross-domain intelligence platform integrating AI, robotics and cloud

Computer Vision AI

Automated interpretation of video, sonar and thermal data streams.

Automatic Defect Detection

Corrosion, cracking and anomaly classification without manual review.

Predictive Maintenance

Condition trends that move work from reactive to planned intervention.

Real-Time Monitoring

Live data from subsea, ground and aerial assets in one operating picture.

Digital Twin

A continuously updated digital model of the asset and its condition.

Automated Reporting

Inspection findings compiled into client-ready deliverables.

SSAEPL Profiler Series

Precision CTD and TD instrumentation for ocean observation

The SSAEPLPro series delivers laboratory-grade conductivity, temperature and depth measurement in compact, deployable housings — supporting profiling, moored, ROV/AUV-mounted and long-duration self-contained operation.



SSAEPLPro 7000

CTD Profiler

- Deep-rated CTD profiling instrument
- Synchronous C, T and D sampling
- Fast-response, low-drift sensor set
- Full-ocean-depth survey and research work



SSAEPLPro 600

CTD Profiler

- Compact CTD for shallow and coastal work
- Long-endurance battery operation
- Simple single-operator deployment
- Aquaculture, ports and inland waters



SSAEPLPro TD

Temperature & Depth Profiler

- High-precision temperature and depth
- Self-contained or direct-reading modes
- Very low power, long deployments
- Hydrographic and environmental monitoring

SSAEPLPro 7000 CTD Profiler

High-precision ocean profiling for demanding deep-water programmes



Developed with a national marine sensing laboratory, the SSAEPLPro 7000 combines a multi-parameter sensor set with adaptive filtering to deliver stable, fast-response conductivity, temperature and depth data. Synchronous sampling of all three parameters preserves profile integrity even during rapid vertical transits, while low-drift sensors reduce recalibration frequency and lifecycle cost.

Product highlights

- High accuracy across the full measurement range
- Pressure-resistant, corrosion-resistant housing
- Anti-fouling design for extended immersion
- Compact and highly reliable, with low maintenance

Deployment & interfaces

- Extremely low power draw in measurement mode
- USB interface for configuration and data transfer
- Suited to profiling, moored and ROV/AUV mounting
- Domestic and customer-specified communication support

SSAEPLPro 7000 – Technical Specifications

Maximum Pressure Rating	70 MPa	Temperature Accuracy	$\pm 0.002\text{ }^{\circ}\text{C}$
Temperature Resolution	0.0001 $^{\circ}\text{C}$	Temperature Stability	0.001 $^{\circ}\text{C}$ / annum
Temperature Range	0 – 35 $^{\circ}\text{C}$	Conductivity Accuracy	$\pm 0.003\text{ mS/cm}$
Conductivity Range	0 – 70 mS/cm	Conductivity Resolution	0.0001 mS/cm
Conductivity Stability	0.0017 mS/cm per month	Pressure Accuracy	0.01 % FS
Pressure Resolution	0.001 % FS	Pressure Stability	0.1 % FS / year
Sampling Rate	25 Hz	Power Consumption	< 120 mA (measurement mode)
Supply Voltage	9 – 36 V	Weight / Weight in Water	3.9 kg / 0.6 kg

Why it matters

- Deep rating covers the vast majority of continental-shelf and slope work
- Millikelvin accuracy supports oceanographic-grade data sets
- 25 Hz sampling resolves fine structure at profiling speed



Specifications per manufacturer datasheet and subject to change; confirm final values with SSAEPL at time of order.

SSAEPLPro 600 CTD Profiler

Compact, self-contained profiling for coastal and inland waters

The SSAEPLPro 600 is a specialised conveying instrument designed for shallow-water applications, providing precise conductivity, temperature and depth measurement with the ergonomics of a single-operator deployment. It suits routine water-quality monitoring, port and harbour surveys, aquaculture sites and academic field programmes where fast mobilisation matters more than deep pressure rating.



Product highlights

- Optimised for shallow and near-shore deployment
- Long-term stability with reliable, repeatable output
- Ultra-compact size for flexible, rapid deployment
- Low maintenance burden across the service life

Configuration & support

- Supplied with instrument body, cable and data software
- Flexible, customisable communication configuration
- RS-485, RS-232 and USB interface options
- Field-replaceable battery pack with documented procedure

SSAEPLPro 600 – Technical Specifications

Maximum Pressure Rating	60 MPa	Temperature Accuracy	±0.002 °C
Temperature Resolution	0.0001 °C	Temperature Stability	0.001 °C / annum
Temperature Range	0 – 35 °C	Conductivity Accuracy	±0.003 mS/cm
Conductivity Range	2 – 70 mS/cm	Conductivity Resolution	0.0001 mS/cm
Conductivity Stability	0.0017 mS/cm per month	Pressure Accuracy	0.01 % FS
Pressure Resolution	0.001 % FS	Pressure Stability	0.1 % FS / year
Sampling Rate	10 Hz	Power Consumption	< 120 mA (measurement mode)
Dimensions	300 mm × 57 mm	Weight / Weight in Water	4.2 kg / 0.8 kg

Best fit

- Ports, harbours and coastal survey campaigns
- Aquaculture and water-quality monitoring
- Teaching and research field work needing fast set-up



Specifications per manufacturer datasheet and subject to change; confirm final values with SSAEPL at time of order.

SSAEPLPro TD Profiler

Integrated temperature and depth measurement with very low power draw



The SSAEPLPro TD Profiler is an integrated, high-precision dual-parameter sensing instrument for temperature and depth. It features rapid response, high accuracy and strong long-term stability, and is widely applied in hydrographic survey, environmental monitoring and marine research — supporting continuous, unattended acquisition over extended deployments.

Product highlights

- High accuracy with wide measurement range
- Extremely low power draw, long endurance
- Compact, reliable and easy to operate

Self-contained mode

- Powered by two 3.6 V internal lithium batteries
- 32 GB memory; sampling rate up to 10 Hz (adjustable)
- At 5-minute intervals, continuous operation exceeds 270 days
- Configuration and data transfer via USB

Direct-reading mode

- Operating voltage 5 – 36 V
- Data acquisition and readout via RS-232 or RS-485
- Live output for shipboard or platform integration

Specifications per manufacturer datasheet and subject to change; confirm final values with SSAEPL at time of order.

Industries We Serve

Proven across offshore, infrastructure and public-sector programmes

Offshore energy

- Offshore oil & gas
- Offshore wind & renewables
- Marine construction

Maritime & defence

- Ports & harbours
- Defence & homeland security
- Government agencies

Industrial & utilities

- Mining
- Utilities
- Infrastructure

Environment & research

- Water & wastewater
- Aquaculture
- Research & academia

Every sector is supported by the same integrated approach: the right technology, engineered into your operation and supported through life.

Services & Lifecycle Support

From first consultation to long-term operational support

01 **Technology consulting**
Requirements, feasibility and technology selection.

02 **Engineering & integration**
System design and integration into existing operations.

03 **Equipment supply**
Sourcing and delivery from world-class partners.

04 **Installation & commissioning**
On-site build, testing and acceptance.

05 **Operations & maintenance**
Planned servicing and calibration programmes.

06 **Technical training**
Operator and maintainer competency development.

07 **Lifecycle & spares**
Spare parts management and obsolescence planning.

08 **Project management & 24/7 support**
Single point of accountability, round-the-clock response.

Let's Engineer Your Next Programme

Talk to us about instrumentation supply, integrated inspection systems, or a full turnkey delivery. We will scope the technology around your operation and support it through life.

Next steps

- Share your operating depth, parameters and duty cycle
- We recommend the SSAEPLPro configuration and interfaces
- Quotation, delivery schedule and training plan follow

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