



## RAMSES

### SYNTHETIC BASELINE POSITIONING SYSTEM

RAMSES is an intelligent Acoustic Synthetic Baseline positioning system. Combined with an IXSEA Inertial Navigation System (tight coupled with PHINS, PHINS 6000, ROVINS) to deliver its full potential, the RAMSES / INS solution will provide the highest grade position accuracy and redundancy.

#### FEATURES

- Sparse array system (1 to 10 beacons)
- Decimetric accuracy range measurement
- Auto calibration mode using SLAM algorithm
- Wideband modulation

#### BENEFITS

- Rapid and flexible deployment
- Highest precision navigation, smooth and drift-free positioning
- Position is immediately available even with transponders initial position unknown
- IXSEA transponder (RT9 series)



**APPLICATIONS** • Site survey • Pipe/cable route survey • Subsea construction • Metrology  
• High precision AUV/ROV navigation

# RAMSES

## TECHNICAL SPECIFICATIONS

### PERFORMANCE

---

Distance measurement accuracy (RAMSES to transponder)	<10cm (MFSK)
Position accuracy (INS aided)	submetric
Maximum range	4,000m
Number of transponders (simultaneous)	1 to 10
Frequency range	18 to 24.5kHz

### CHARACTERISTICS

---

Power supply	24~75Vdc
Power consumption	9W
Dimensions	550mm x 126mm diam.
Weight in air/water	18kg / 12kg
Depth rating	6,000m
Construction	Super Duplex stainless steel

### INTERFACES

---

Communication	RS232c / Ethernet NMEA 0183 industry standard
---------------	--

### OPTIONAL TRANSPONDER (RAMSES BEACON)

---

Depth rating	6,000m
Release function (IXSEA OCEANO range compatible)	RL: 2,500kg SWL: 2,500kg TL: 5,000kg
Frequency range	18~24.5kHz, broadband spectrum
Power supply	internal C-size batteries (alkaline, lithium, off the shelf)
Battery life (alkaline cells, listening / active)	2 years / 100,000 pings
Dimensions	660mm, 130mm diam.
Weight in air/water	25 / 17kg



Specifications subject to change without notice