

OCEANO ET/RT861S series LF-Transponders



DESCRIPTION

Compact and durable OCEANO ET/RT861S series LF-Transponders are fully compatible with POSIDONIA USBL and classic LBL-LF navigation systems.

OCEANO ET/RT861S series LF-Transponders are available in Recoverable version and Expandable version (without release mechanism)

Constructed of high tensile strength Super Duplex Stainless Steel offering excellent corrosion resistance, the RT861S series is ideal for harsh working conditions and deployment in up to 6,000m of water.

OCEANO RT/ET861 series transponders from IXBLUE, features very low power consumption, a field proven and highly secure command coding, Dual Transponder mode, Pinger mode, optional pressure sensor and telemetry and a battery pack using standard replaceable D-Size cells (Alkaline or Lithium without any hardware modification).

KEY FEATURES

- Transponder compatible with POSIDONIA USBL and classic LBL positioning systems
- Compact and durable design with corrosion resistant Super Duplex Stainless Steel housing
- 6,000 m depth rating (624 Bars)
- Frequency Range : 8 to 18 kHz
- Omni-directional Integral Transducer
- Tonal and/or wide-spectrum signal technology (Transmitter modes)
- Dual Transpond channels for positioning applications
- Secure and field proven FSK 2-states command coding structure
- Field set-up with Graphic User Interface software (for PC-Windows®) through RS232 serial port
- Very low power consumption
- Constant Transmit Level across pulse length and battery life
- Ranges well in excess of 10,000m in good environmental conditions
- Battery pack using standard D-size replaceable cells (Alkaline or Lithium)

ACCESSORIES / OPTIONS

- Responder mode and External /Supply and Serial I/O port
- Remote head transducer with Omni-directional or Directional beam pattern
- 7000m extended depth rating (RT_ET871 series with 750 Bars Integrity)
- Pressure sensor and Acoustic Telemetry link (Pulse to pulse time modulation) and/or serial asynchronous link
- Signal conditioning for up to four (4) optional analogue sensors (pressure, tilt, temperature, ...)
- Lithium Battery
- Long tube housing option for extending operational life

OTHER MODELS

- Titanium Grade 5 housings on request
- 17" Glass housing with vacuum port (ET861G-VP)



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SPECIFICATIONS

Mechanical Construction	: Super Duplex Stainless Steel
Depth Rating	: 6,000m (624 Bars)
Temperature	: -5°C to +50°C Operating / -20°C to +70°C Storage
Receive Frequency Band	: 8.0 to 16.0 kHz
Transpond Receiving Channels	: 2 x individual channels, field selectable (17xTonal)
Acoustic Command Channels	: 2 x individual channels, factory selectable only
Receive Sensitivity	: 80 +/- 6 dB ref 1µPa
Acoustic Command Coding	: RZ-FSK dual state coding (Tonal for RAMSES-MKSF pulses)
Commands	: ARM & EXECUTION sequence : ENABLE/DISABLE Transponder & Responder modes, RELEASE, Pinger ON/OFF, : Diagnostic, Reset, ...
Transmit Frequency Band	: 7.5 to 18.0 kHz : Tonal (17 codes): 7.5 to 16.0 kHz by 500 Hz step, 10ms pulse : MFSK-POSIDONIA(24 codes): 14.5 to 17.5 kHz, 25ms pulse
Transmit Source Level	: 191 +/-4 dB re 1µPa @ 1m (default) / 188 dB or 185 dB level field selectable
Telemetry (Optional)	: Pulse to Pulse Modulation : LBL telemetry : 12 bit time PPM / POSIDONIA telemetry : 8xMSB time PPM & 4xLSB : MFSK coding
Transducer Type	: Integral or Remote / Split head
Transducer Beam pattern	: Omni-directional
Turnaround time	: 20 ms to 200 ms in 1 ms step, 20 ms default (Field programmable)
Blanking (Inhibition) Time	: 1 s to 31 s in 1 s step, 4 seconds default (Field programmable)
Internal Battery	: 18xAlkaline D-Size cells (Lithium on option) and 1x9V (6LR61) backup cell for release motor (if any)
Listening Life (@ 20°C)	: Alkaline : 50 months / Lithium : 96 months
Number Replies (Typical, @ 20°C)	: Alkaline / Lithium
Tonal @ 12 kHz	: up to 210,000 / 500,000
MFSK-POSIDONIA	: 55,000 / 140,000
I/O port (Optional)	: Responder trigger / External Power Supply / RS232 or RS422 serial link : SUBCONN BH8M male interface connector mating with IL8F female plug
MMI Graphic User Interface	: Running on PC-Windows via RS232 I/O port : Interactive configuration

Model	ET861S-R	OCEANO RT2500S Light	OCEANO RT2500S Universal	OCEANO RT2500S Side Bar	OCEANO RT5000S
Other name	(ET861S-R)	(RT861CS)	(RT861B2S)	(RT861B1S)	(RT861DS)
Ordering Code	KAA00113	KAA00196	KAA00193	KAA00191	KAA00205
Drawing Assembly (Integral Head)	3859004	3869001	3869100	3869200	3869300
Transducer Type	Integral	Integral	Integral	Integral	Integral
Depth Rating	6,000m	6,000m	6,000m	6,000m	6,000m
Operating Frequency (LF)	8-18 kHz	8-18 kHz	8-18 kHz	8-18 kHz	8-18 kHz
ON-OFF switch	YES	NO	NO	NO	NO
Dimensions (mm)	D = 130 L = 782	D = 130 L = 725	D = 130 L = 830	130 x190 L = 855	D = 130 L = 908
Overall Weight (Air / Water)	25 / 16 kg	26 / 18 kg	30 / 22 kg	36 / 26 kg	40 / 31 kg
Lifting Load & Release (RL/SWL/TL)	N.A	0.5 / 2.5 / 5t	2.5 / 2.5 / 5t	2.5 / 2.5 / 5t	5 / 5 / 10t
Central or Side Loading	N.A	Central	Central	Side bar	Side bar
Verticality indicator (+/-50°)	Standard	Standard	Standard	Standard	Standard
Swap of Alkaline/Lithium cells	Standard	Standard	Standard	Standard	Standard
Remote Transducer head option	Optional	Optional	Optional	Optional	Optional
Responder/Ext. Power Supply/Serial	Standard	Optional	N.A.	N.A.	N.A.
Straingauge pressure sensor (0.15%)	Optional	Optional	Optional	Optional	Optional
Extended depth rating (7,000m)	Optional	Optional	Optional	Optional	Optional
Export Regulation	Dual Use	Dual Use	Dual Use	Dual Use	Dual Use

Specifications subject to change without notice

ET/RT861S series – Feb. 2013

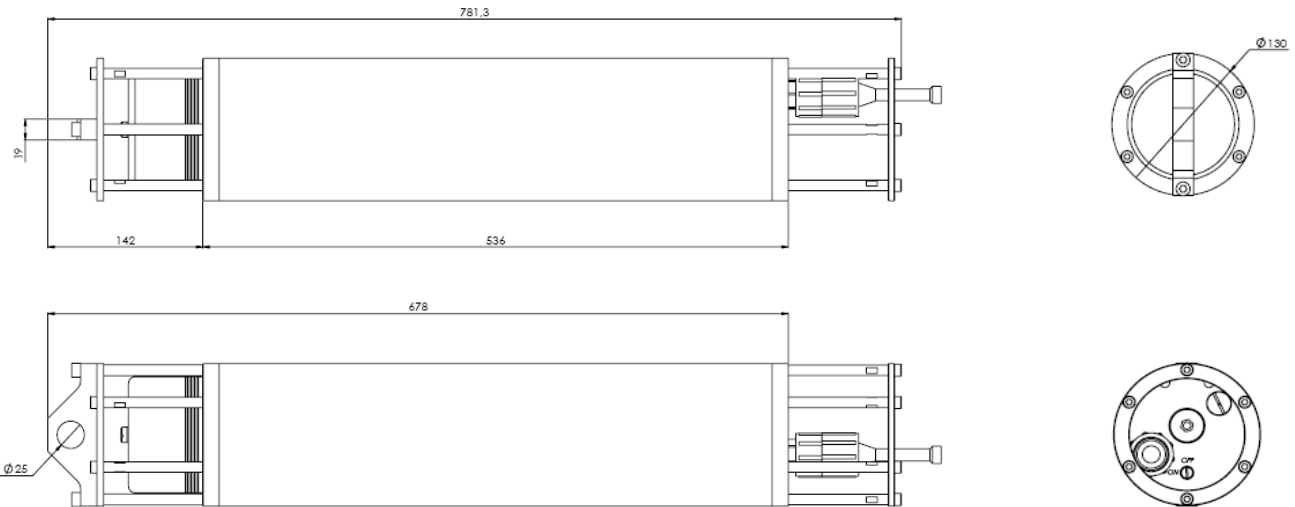


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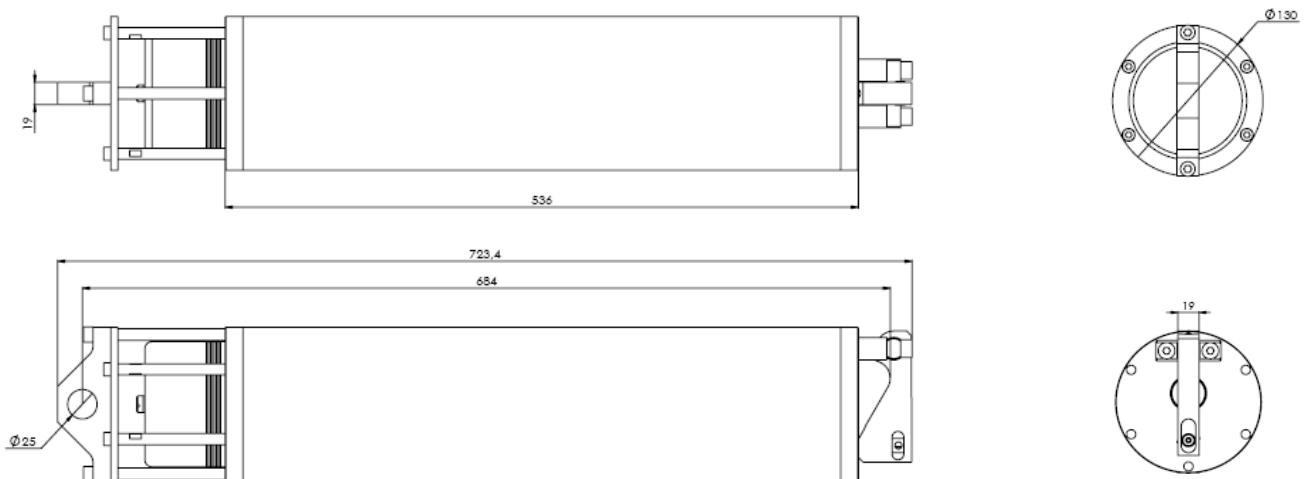
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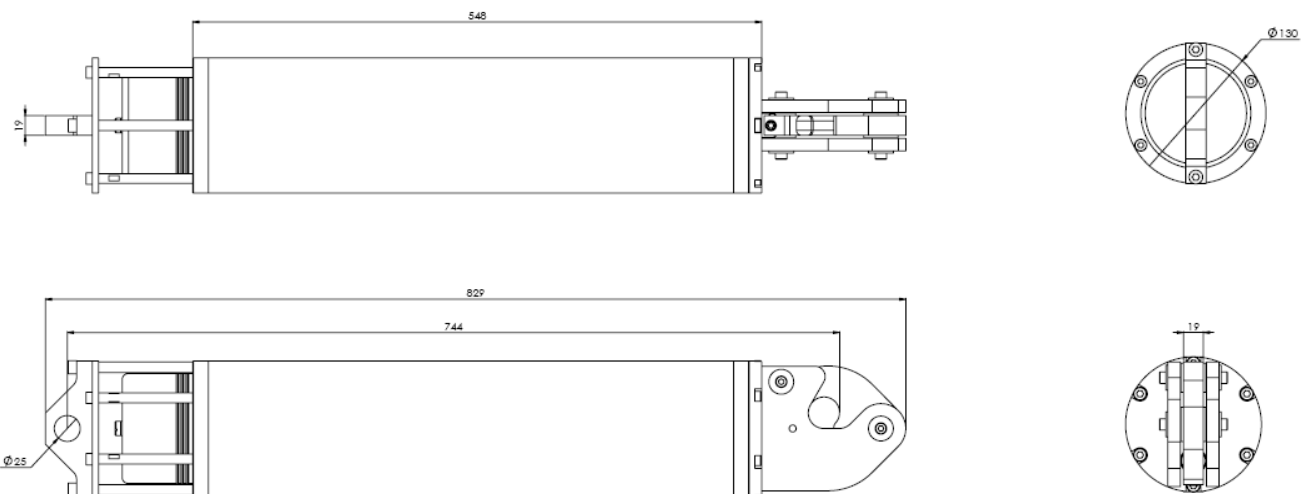
ET861S / Code : KAA000113 / Drawing : 3859004



OCEANO RT2500S Light - RT861CS / Code : KAA000196 / Drawing : 3869001



OCEANO RT2500S Universal - RT861B2S / Code : KAA000193 / Drawing : 3869100



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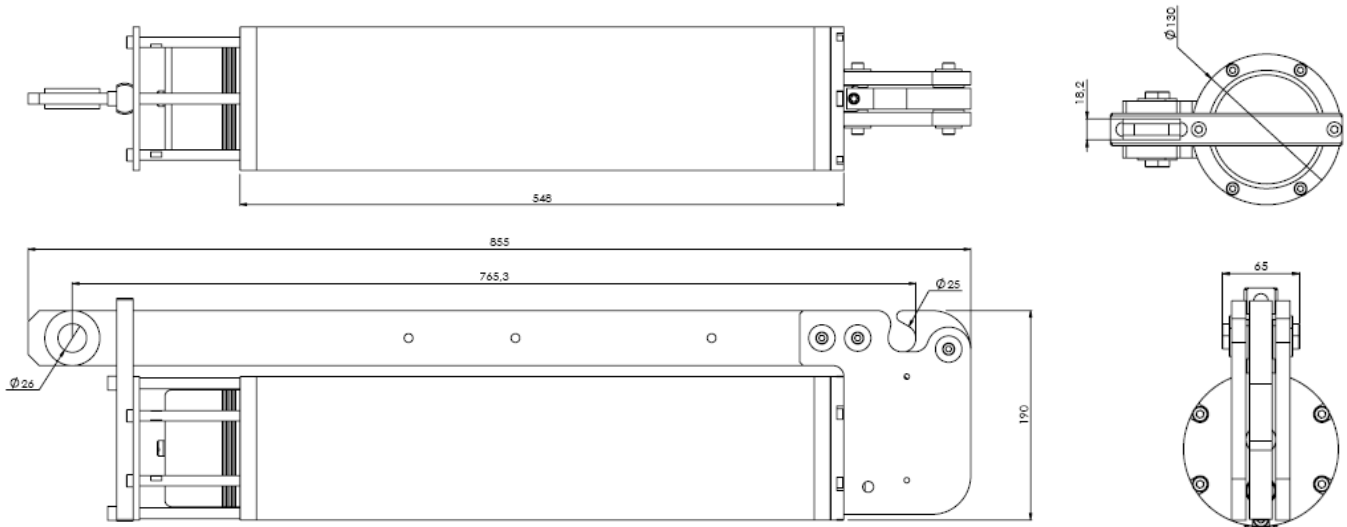


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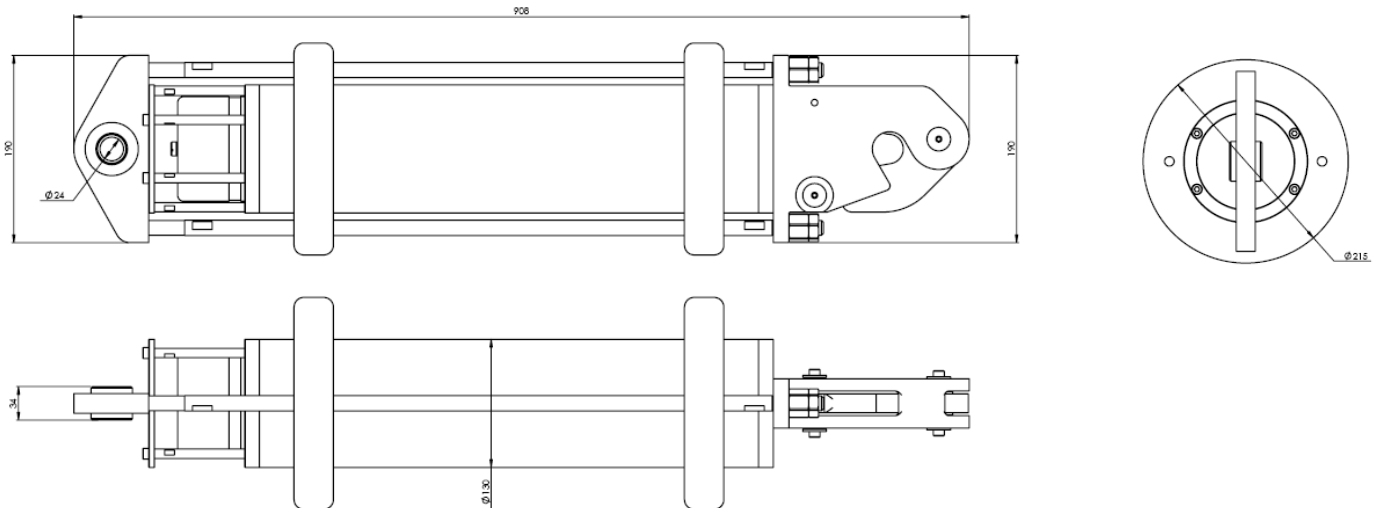
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OCEANO RT2500S Side Bar - RT861B1S / Code : KAA000191 / Drawing : 3869200



OCEANO RT5000S - RT861DS / Code : KAA000205 / Drawing : 3869300



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