

# Datasheet

## WVT Dunker



**Wideband Versatile Transceiver (WVT) Dunker is a transceiver/transponder used together with the Deck Topside to control and release Sonardyne acoustic releases at longer slant ranges than possible with the Nano Dunker**

The WVT operates in Sonardyne Wideband<sup>®</sup>2 and combines the functions of transponder and transceiver in a single low power unit.

WVT Dunker is available in MF and LMF directional versions.

Combined with the Type 8373 Deck Topside, the MF version comprises the mid water deck kit (602-0179). This is designed for use with the RT6-3000 for slant ranges in excess of 1,000 m.

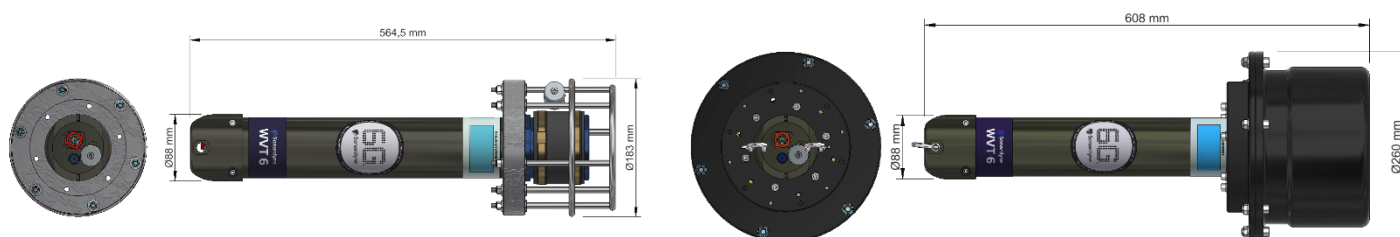
Combined with the Type 8373 Deck Topside, the LMF version comprises the deep-water deck kit (602-0180). The LMF version is designed for use with the RT6-6000 in all water depths down to 6,000 m.

### Key features

- Incorporates Sonardyne Wideband 2 acoustic technologies
- Compatible with Deck Topside for longer range operations
- Extremely low power consumption
- Internal back-up battery with external trickle charge
- Configurable as a surface vessel unit for AUV ranging and telemetry

# Specifications

## WVT Dunker



Features		Type 8220-1152	Type 8220-1156
Depth rating		1,000 m	1,000 m
Operating frequency		MF (20–34 kHz)	LMF (14–19 kHz)
Transducer beam shape		Directional	Directional
Transmit source level (re 1 $\mu$ Pa @ 1 m)	High power	187 dB	193 dB
	Low power	181 dB	187 dB
Tone Equivalent Energy (TEE) <sup>1</sup> WBv2+	High power	193 dB	199 dB
	Low power	187 dB	193 dB
Range precision		Better than 15 mm	Better than 15 mm
Depth sensor		$\pm$ 0.5% full scale	$\pm$ 0.5% full scale
Communications interface		RS232 (9,600–115,200 baud)	
External Supply voltage		24 or 48 V dc ( $\pm$ 10%)	24 or 48 V dc ( $\pm$ 10%)
External power	Sleep	~650 mW	~650 mW
	Wideband listening	~1 W	~1 W
	Battery charging	6 W	6 W
	Peak (during transmission)	<50 W	<50 W
Battery life (Li-ion 15 V)	Listening	30 days	30 days
	Continuous 5 sec interrogation	Approx. 6 days at low power	
Operating temperature		-5 to 40°C	-5 to 40°C
Storage temperature		-20 to 55°C	-20 to 55°C
Mechanical construction		Anodised aluminium	
Dimensions (diameter x length)		183 x 564.5	260 x 608
Weights in air/water <sup>2</sup>		6.7/4.2 kg	13.1/5.6 kg
Options		Part number	
Mid Water Deck Kit, Release		602-0179	n/a
Deep Water Deck Kit, Release		n/a	602-0180

<sup>1</sup> WBv2+ signals are 4x the duration of Sonardyne tone signals (WBv1 & WBv2 are 2x). The TEE figure shows the operational performance when comparing Wideband and tone systems.

<sup>2</sup> Estimated weights.