



# Programmable Generic transponder

## Types 7971/7977/7978

The Programmable Generic Transponder (PGT) is the successor to Sonardyne's Type 7730 HPR Transponder/Responder. Available in three versions; Type 7971 Omni-Directional, Type 7977 Directional and Type 7978 Super Directional, the PGT family incorporates Sonardyne's latest acoustic design developments with the hardware already installed to permit through-life upgrading of functionality.

Applications for the PGT include the accurate tracking of cable ploughs and deep ROVs, long term marking of seabed targets, such as wellheads, and as a position ref reference transponder for dynamic positioning systems.



### FEATURES AND BENEFITS

#### Type 7971 PGT

- Depth rated to 2,500m (4,000m rated option available)
- Omni-Directional transducer
- Channel selection via dual external controls or optional serial data port
- Depth telemetry capability option
- 'Screw-off' acoustic release available
- Choice of short (No battery) or long housing available

#### Type 7977/7978 PGT

- Depth rated to 2,500m (4,000m and 6,000m rated option available)
- High power Directional and Super Directional transducers
- Depth telemetry capability option
- 'Screw-off' acoustic release available
- External On/Off and channel controls
- Choice of short (No battery) or long housing available

### TECHNICAL SPECIFICATION

PGT Type	Type 7971	Type 7977	Type 7978
<b>Depth Rating</b>	2,500m (4,000m option available)	2,500m (4,000m option available)	2,500m (4,000m and 6,000m option available)
<b>Frequency Channels</b>	All 14 HPR 300 channels All 56 HPR 400 channels	All 14 HPR 300 channels All 56 HPR 400 channels	All 14 HPR 300 channels All 56 HPR 400 channels
<b>Transducer Beam Shape</b>	Omni-Directional $\pm 130$ degrees	Directional $\pm 30$ degrees	Super-Directional $\pm 12$ degrees
<b>Acoustic Output Power (dB re 1 <math>\mu</math>Pa @ 1m)</b>	192dB $\pm$ 3dB	200 dB $\pm$ 3dB	206 dB $\pm$ 3dB
<b>Receive Sensitivity (dB re 1 <math>\mu</math>Pa)</b>	< 85 dB	< 85 dB	< 85 dB
<b>Listening Life (Days)</b>	Alkaline 3.7 years Lithium 6.1 years	Alkaline 3.7 years Lithium 6.1 years	Alkaline 3.7 years Lithium 6.1 years
<b>No. of Transmissions (High Power on Channel 33)</b>	Alkaline 1.0 x 10 (6) Lithium 2.3 x 10 (6)	Alkaline 0.8 x 10 (6) Lithium 1.8 x 10 (6)	Alkaline 0.5 x 10 (6) Lithium 1.2 x 10 (6)
<b>Mechanical Construction</b>	Aluminium Alloy Hard Anodised	Aluminium Alloy Hard Anodised	Aluminium Alloy Hard Anodised
<b>Max Dimensions</b>	183mm dia. x 1107mm long	183mm dia. x 1107mm long	183mm dia. x 1107mm long
<b>Weight in Air/ Water</b>	22Kg/9Kg	22Kg/9Kg	22Kg/9Kg

Note: Dynamic Positioning Services reserve the right to amend this specification without prior notice.