



# 水下温压变送器

水下温压变送器可实时测量水下各类设施的温度和压力，让作业者实时了解水下设施运行工况并及时调整油气生产措施，为生产优化和流动保障等提供重要数据支持。该产品基于高精度压阻式单晶硅测量压力，并利用实时测量的温度进行补偿，保证产品具有高灵敏度和可靠性。由权威第三方挪威船级社（DNV）进行型式认证。

## 技术指标

内容	技术指标
型号	SPPTT-2000
设计寿命	30年
工作水深(米)	3000米
设计压力(psi)	10000psi
设计温度	-46~121°C
压力精度	±0.1% F.S.
温度精度	±1% F.S.(标定±0.5% F.S.)
压力长期稳定性	±0.05%F.S./年
温度长期稳定性	±0.1% F.S./年
信号类型	Modbus RTU Rs485
产品级别	PSL 3G
材料级别	HH
机械接口法兰	2 1/16"API
认证方式	挪威船级社(DNV)

## 产品特点

- 实时、准确的测量数据
- 权威第三方认证
- 严格按照API 6A、API 17D和API 17F等规范进行开发
- 冗余测量通道设计，可输出双压力双温度
- 多道密封以保证系统可靠性
- 高灵敏度、高分辨率
- 体积小、重量轻

## 应用

- 石油天然气开采：实时监测水下油气设施的温度和压力
- 其他用途如水下观测网、深潜装置等

# Subsea Pressure & Temperature Transmitter (PTT)

Subsea Pressure & Temperature Transmitter (PTT) measures the temperature and pressure of various subsea facilities in real-time. It allows operators to understand the operational status of these facilities and adjust oil and gas production measures promptly, ultimately enhances production optimization and flow assurance. The product is based on high-precision piezoresistive monocrystalline silicon to measure pressure and uses real-time measured temperature for compensation to ensure high sensitivity and reliability.

## Features

- Real-time and accurate measurement
- Certified by authoritative third party (DNV)
- In accordance with specifications API 6A, API 17D and API 17F etc
- Redundant measurements (Dual pressure and dual temperature)
- Multiple seals to ensure high system reliability
- High sensitivity and high resolution
- Compact and light in weight

## Applications

- Oil and Gas industry: Real-time monitoring of temperature and pressure in subsea facilities.
- Others like Subsea Observation Network and Deep-Diving Apparatus etc.

## Specifications

Items	Specifications
Model	SPPTT-2000
Design Life	30 years
Water depth	3000 m
Design pressure	10000psi
Design temperature	-46~121°C
Pressure accuracy	±0.1% F.S.
Temperature accuracy	±1% F.S.(Calibrated ±0.5% F.S.)
Communication protocol	Modbus RTU RS485
Product specification level	PSL 3G
Material grade	HH
End connection	2 1/16" 10K API 6A
Third party certification	DNV

### 海默新宸水下技术（上海）有限公司

Haimo Subsea Technology (Shanghai) Co., Ltd.  
中国(上海)自由贸易试验区临港新片区海基六路218弄28号楼

+86 (21) 58281567 18153607606  
jwzhang@haimo.com.cn