SOLAS INTRINSICALLY SAFE RADIO TP9000 EX





















RADIO HIGHLIGHTS

- VHF & UHF
- Intrinsically Safe ATEX
- **IP67 Waterproof**
- Power Output 2 Watt
- CTCSS, 5-TONE, CCIR, ZVEI, EEA & EIA
- Man-down function
- 16 Channels
- PC programmable
- Long operational time 3000 mAh battery
- **Extensive Marine Certification**

ATEX RATINGS

GAS RATING:

- ATEX: II 2 G Ex ib IIC T4
- IECEx: Ex ib IIC T4

DUST RATING:

- ATEX: II 2 D Ex ib IIIC T110 °C
- IECEx: Ex ib IIIC T110 °C

MINING RATING:

- ATEX: I M2 Ex ib I
- IECEx: Ex ib I

For safe operation in hazardous areas

TP9000 EX is a unique product which combines mechanical robustness and the latest state of the art radio technology into a Hand Held Radio with a user friendly design.

The Radio is IP67 waterproof and can be used as the ultimate communication tool within chemical industries, fire brigades, emergency & rescue services, airports, off-shore industries, etc.

As option a range of accessories such as Speaker Microphone, Push-to-Talk units, headsets from TP Radio, or other quality brands of ATEX equipment are available.

GAS Protection: ATEX: II 2 G Ex ib IIC T4 / IECEx: Ex ib IIC T4

II (Electrical equipment for explosive gas atmosphere other than mines) 2G (zone 1) Ex ib (intrinsic safety) IIC (hydrogen / acetylene max 2W) T4 (135°C max. surface temp.)

Dust Protection: ATEX: II 2 D Ex ib IIIC T110°C / IECEx: Ex ib IIIC T110°C

II (Electrical equipment for explosive gas atmosphere other than mines) 2D (zone 21) Ex tD (Dust) A21 (certified for dust zone 21 by IP rating) IP6x (IP rating zone 21) ib D21 (zone 21) T110°C (110°C max. surface temp.)

Mining Protection: ATEX: I M2 EX ib I / IECEx: Ex ib I

I(Electrical equipment for mines) M2 (For mines - De-energised) EX (Explosion-proof equipment) ib (intrinsic safety) I (Methane)

Technical Specifications:

General data:	VHF UHF	Transmitter:	
Frequency band	145-174 MHz 406-470 MHz	Output Power	Programmable 0.5 - 2 Watt
Max. Number of	16	Transmission of spurious	< 0,25 µW or - 36 dBm
channels Channel	12,5 / 20 / 25 KHz	Antenna & cabinet	
Spacing Frequency error	± 2 ppm	Max. Deviation	± 5 KHz / 25 KHz channel
Bandwidth	29 MHz 64 MHz	Modulation distortion	< 5 % @ ± 3,0 KHz
Operation mode	Simplex/Semi-Duplex	Signal / noise relation	40 dB
Antenna Impedance	50 ohm	LF frequency response	300 - 3000 Hz
Temperature range	-20 °C to +55 °C		
Dimensions incl.	H = 137, B = 64, D = 31mm	Battery:	
3000mAh battery	250 g.	•	
Weight incl. battery		Operational time (fully	5 % TX, 5 % RX & 90 % Standby
		charged battery & 2 W TX-	3000 mAh battery : 16 hours
Receiver:		output)	
	46,35 MHz	Signalling:	
1. IF-frequency	450 KHz	3	
2. IF-frequency	0,45 μV	CCIR, ZVEI, EEA & EIA	En- & decoder up to 3 sequencies of each
Sensitivity at 20 dB SINAD	·	, ,	8 tones, programable tone lenght, lenght of
(EMF) (25 KHz channel spacing)	0,3 μV		first tone & pre-ample. Individual call,
at 12 dB SINAD EMF:	2 x 0,5 Watt		• • •
LF output power	< 10 %	CTCSS	En-/ Decoder.
LF distortion	300 - 3000 Hz		The channels can be programmed
LF frequency response	45 dB		individually with different CTCSS
Signal / noise ratio	-3 dB		tones.
Co-Channel attenuation	> 70 dB	Side connector:	16 pin for accessories
Neighbour channel	> 70 dB	Side connector.	10 p 101 accessories

The UHF version is type approved for On Board Communication according to EN 300 720 and fulfils the IEC 60945 marine standards. A perferct tool to fulfilment of the SOLAS requirement.

The Specifications are typical and subject to change without prior notice. 21.11.2017

Conforms according to the Directives

selectivity Attenuation of

Spurious Intermodulation

selectivity Blocking

Transmission of spurious (antenna &

cabinet) Squelch tresshold level

ATEX 2014/34/EU, RoHS 2011/65/EU, MED 2014/90/EU & RED 2014/53/EU **Applied standards**

EN 62368, EN/IEC 60945, EN 301.489, EN 300.086 & EN300.720 (analog part). **Classifications**

> 66 dB > 90 dB

2 nW equivalent to

Programmable

IP67 Waterproof / Exceeds MIL 810 c,d,e,f

GAS Protection: ATEX: II 2 G Ex ib IIC T4 / IECEx: Ex ib IIC T4

Dust Protection: ATEX: II 2 D Ex ib IIIC T110°C / IECEx: Ex ib IIIC T110°C

Mining Protection: ATEX: I M2 EX ib I / IECEx: Ex ib I

UNIT 5, THE RINGWAY CENTRE, EDISON ROAD BASINGSTOKE, HAMPSHIRE, RG21 6YH 01256 40 60 50 SALES@RADIOTRADE.CO.UK

SOLAS

COMPLIANT



