PD605

DMR handheld radio

Ergonomic product design

With its compact metal housing, outstanding voice quality and support for both digital and analog radio, the PD605 will bring a breath of fresh air to your radio communication.

Versatile

The PD605 has both an analog mode and a digital mode and is compatible with analog radio systems, as a consequence it is very easy for you to change to the digital age.

GPS support (optional)

The variant with a GPS module supports applications such as Automated Vehicle Location (AVL) to optimize your workflow.

Technical Data PD605

General data

Frequency range	VHF: 136 – 174 MHz UHF: 400 – 470 MHz | 400 – 527 MHz
Supported operating modes	▪ DMR Tier II (ETSI TS 102 361-1/2/3 ▪ Simulcast ▪ XPT Digital Trunking ▪ DMR Tier III (ETSI TS 102 361-1/2/3/4) ▪ Analog
Number of channels	32
Number of zones	3
Channel spacing	12.5 / 20 / 25 kHz (analog) 12.5 kHz (digital)
Operating voltage	7.4 V (nominal)
Standard battery	1500 mAh (lithium-ion battery)
Battery service life (5-5-90 duty cycle, high transmitting power, standard battery)	approx. 11 hours (analog) approx. 16 hours (digital) at 1500 mAh; approx. 20 hours (digital) at 2000 mAh
Frequency stability	± 0,5 ppm
Antenna impedance	50 Ω
Dimensions (H × W × D, without antenna)	119 x 54 x 27 mm
Weight (with antenna and standard battery)	ca. 290 g
Programmable keys	1

Environmental conditions

Operating temperature range	- 20 °C to + 60 °C
Storage temperature range	- 40 °C to + 85 °C
ESD	IEC 61000-4-2 (Level 4), ± 8 kV (contact), ± 15 kV (air)
Protection against dust and moisture	IP67
Shock and vibration resistance	MIL-STD-810 C / D / E / F / G
Relative humidity	MIL-STD-810 C / D / E / F / G

GPS (optional)

Time to first fix (TTFF)	< 1 Minute (cold start) < 10 seconds (warm start)
Horizontal accuracy	< 10 meter

Transmitter

Transmitting power	VHF: 1 / 5 W UHF: 1 / 4 W
Modulation	11 K0F3E at 12,5 kHz 14 K0F3E at 20 kHz 16 K0F3E at 25 kHz
4FSK digital modulation	12.5 kHz (data only): 7K60FXD 12.5 kHz (data and voice): 7K60FXW
Interfering signals and harmonics	- 36 dBm (< 1 GHz) - 30 dBm (> 1 GHz)
Modulation limiting	±2.5 kHz at 12.5 kHz ±4.0 kHz at 20 kHz ±5.0 kHz at 25 kHz
Noise cancellation	40 dB at 12.5 kHz 43 dB at 20 kHz 45 dB at 25 kHz
Adjacent channel selectivity	60 dB at 12.5 kHz 70 dB at 20 / 25 KHz
Audio response (TIA-603D)	+ 1 dB to - 3 dB
Nominal audio distortion	≤ 3 %
Digital vocoder type	AMBE +2™

Receiver

Sensitivity (analog)	0,22 µV (12 dB SINAD) 0,22 µV (typical) (12 dB SINAD) 0,4 µV (20 dB SINAD)
Sensitivity (digital)	0,22 µV / BER 5 %
Adjacent channel selectivity TIA-603 ETSI	60 dB at 12.5 kHz / 70 dB at 20 and 25 kHz 60 dB at 12.5 kHz / 70 dB at 20 and 25 kHz
Intermodulation TIA-603 ETSI	70 dB at 12.5 / 20 / 25 kHz 70 dB at 12.5 / 20 / 25 kHz
Spurious response rejection TIA-603 ETSI	70 dB at 12.5 / 20 / 25 kHz 70 dB at 12.5 / 20 / 25 kHz
Signal-noise ratio (S/N)	40 dB at 12.5 kHz 43 dB at 20 kHz 45 dB at 25 kHz
Nominal audio power output	0.5 W
Nominal audio distortion	≤ 3 %
Audio response (TIA-603D)	+ 1 dB to - 3 dB
Conducted spurious emission	< - 57 dBm

All technical information was determined at the factory and in accordance with the corresponding standards. Subject to change on the basis of continuous development.

SGS Certificate DE11/81829313