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Technical Specification Nera WorldPhone Marine w/TPU		

Specifications subject to changes without notice

NWM Nera WorldPhone Marine
ARU Antenna Radio Unit
PSU Power Supply Unit (DC/DC Converter)
TPU TelePhone Unit

General

The Nera WorldPhone Marine is Inmarsat approved with Certificate Number 76EB52

Standard Functions:

- Voice
- Fax 2.4 kbps Group III
- Data 2.4 kbps
- SIM Card handling
- Hands free (push to talk)
- 10 different last number dialled
- Telephone book for 99 numbers (22 digit)
- Prepaid minutes
- Call logging
- Access Code
- Restricted dialling
- Restricted LES
- Multi language

Optional Functions:

- Secure Interface Unit - STU-II B / STU III Interface

Display size and number of characters:

- Large graphical back light LCD display (64*240 pixels). 8*40 characters in text mode.

Keyboard:

- On/Off
- Help
- Clear
- 12 Alpha numerical keys
- 4 Soft keys (Function changes according to task)
- 4 Arrow keys (Function changes according to task)

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Size and weight :

Antenna Unit	:	H = 260mm, Diameter = 275 mm, Weight = 3,8 kg
Telephone unit	:	W=235 mm, Depth =190 mm, H=44 mm, Weigh = 1,0 kg
Power Supply Unit	:	W=230 mm, D=197 mm, H=33 mm, Weigh = 1,6 kg

Power:

DC input to PSU	:	10-32 V. Polarity dependant
Typical power consumption	:	During Transmission = 50W, During Standby = 15W.

AC/DC converter (Option) :

AC input	:	240 V, 47-63 Hz, 80 VA.
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Environmental conditions:

<u>Storage</u>	:	-50°C - +80°C
<u>Operational</u>		
Telephone unit	:	-25°C - +55°C, 40°C 95 % humidity (non condensing)
Antenna unit	:	-35°C - +55°C, 40°C 95% humidity, (non condensing)
Infrared	:	500 W/m ² ,
Ultra violet	:	54 W/m ² ,
Visible:	:	1150 W/m ²
Antenna unit	:	IP66,
Telephone unit	:	IP53.
Power Supply	:	IF43
Roll	:	+/- 25 degrees
Pitch	:	+/- 15 degrees
Yaw	:	+/- 8 degrees
Wind	:	Relative average wind velocity up to maximum 200 km/h
Ice	:	Outdoor equipment up to 25 mm
Turning rate	:	50 degrees per second

Robustness and shock:

		<u>Operational</u>
Vibration	:	5 - 20 Hz 0,02g ² /Hz
		20 - 120 Hz - 3dB/octave
		<u>Survival</u>
Vibration	:	Vibration (12,7g RMS) in each of the three mutually perpendicular axes
		5 - 20 Hz 0,05g ² /Hz
		20 - 150 Hz - 3dB/octave

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External Interfaces:

1. Two-wire interface for standard DTMF phone, cordless basestation or PABX (Trunk lines)
2. Two-wire interface programmable for i.e. standard DTMF phone, cordless basestation, PABX (Trunk lines) or fax machine (default).

Specifications for two wire interface:

Connector	: RJ11
Speech level	: +2.5 dBm
Receive level	: -9 dBm
Dial tone	: 425 Hz -19 dBm
DTMF minimum	: Dialling: -20dBm0
Line voltage	: 30V DC
Ringing signal	: 35V RMS 25Hz (Max two telephones/faxes)
Signalling	: Hook off: >20mA/Hook on: < 9mA

3. Data connector for data communication, printer or software download.

Connector	: D-sub, 9 pins RS232
Data Protocol	: Hayes AT compatible
Bitrate	: 1.2 - 38.4 kbps
Parity	: No Parity (AT programmable: Odd/even/mark/space)
Data Bits	: 8 bits (AT programmable: 7 or 8 bit)
Stop bit	: 1 bit (AT programmable: 1 or 2 stop bits)
Flow control	: RTS/CTS (AT programmable NO, XON/XOFF or RTS/CTS)

4. SIM card interface : According to Inm. SDM module B annex 7 (subset of ISO 7816)
5. PSU Antenna plug : 16 QLA 01-2-4c
6. Power connector : Outer 5.5mm, inner 2.1mm length 10mm

Antenna separation:

12 meter cable (standard delivered)

Optional cables with maximum loss -10dB at 1.6 GHz, 0,6 ohm resistance:

Cable Type	Max Length	W/Pig-tail QRPM911059-1000
S01112D	12 m	
RG 223	12 m	
RG 214	24 m	*
RG 214U	28 m	*
Ethernet 062300	40 m	*
S 12272-4	61 m	*
Nokia 1/2"	91 m	*
Cellflex 7/8"	145 m	*
Cellflex 1 1/4"	175 m	*
Cellflex 1 5/8"	230 m	*

