

# Customer Care Solutions

## NPM-6/6X Series Transceivers

### General Information



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## NPM-6/6X Product Selection

The NPM-6/6X is a Triple Band transceiver unit designed for the EGSM900 , GSM1800 and GSM1900 networks. It is both EGSM900 phase 2 power class 4 transceiver (2W) and GSM1800 / GSM1900 power class 1 (1W) transceiver.

## NPM-6/6X Product and modules

Name	Type code	Material code/ module type	Module code
Basic transceiver	NPM-6	0509351	
Basic transceiver	NPM-6X	0509572	
Radio module	NPM-6	AK4	0202004
Radio module	NPM-6X	AK4	0202158
UI board		KU4	0201898
Mechanics assembly parts			0262779
Software module ( basic SW )			On Flash memory

Figure 1: NPM-6/6X transceiver



## Accessories List

Batteries	Product code:
Battery BL-4C 720mAH Li-ion	0670386
Chargers	Product code:
Standard Charger ACP-7E (EUR) 230 Vac (Made in country)	0675144
Standard Charger ACP-7E (EUR) 230 Vac (Made by 'manufacturer')	0675171
Standard Travel Charger ACP-7U (US) 120 Vac (Made in country)	0675143
Standard Travel Charger ACP-7U (US) 120 Vac (Made by 'manufacturer')	0675172
Standard Charger ACP-7X (UK) 230 Vac (Made in country)	0675145
Standard Charger ACP-7X (UK) 230 Vac (Made by 'manufacturer')	0675173
Standard Charger ACP-7H (Hong Kong) 200 Vac	0675146
Standard Charger ACP-7C (China) 220 Vac	0675212
Standard Charger ACP-7C (Philippines) 220 Vac	0675158
Standard Charger ACP-7A (Australia) 240 Vac	0675148
Standard Travel Charger ACP-7AR (Argentina) 220 Vac	0675244
Travel Charger ACP-8E (EUR)	0675195
Rapid Travel Charger ACP-8U (US) 90-264 Vac	0675196
Rapid Travel Charger ACP-8U (US) 90-264 Vac (Made by 'manuf.')	0675269
Travel Charger ACP-8X (UK) 90-264 Vac	0675197
Travel Charger ACP-8J	0675198
Travel Charger ACP-8K	0675199
Fast & Light Charger ACP-8A (Australia) 90-264 Vac	0675214
Fast & Light Charger ACP-8C (China) 90-264 Vac	0675211
Travel Charger ACP-8UB	0675236
Travel Charger ACP-8G	0675237
RapidTravel Charger ACP-8AR (Argentina)	0675248
Travel Charger ACP-12E (Eur)	0675294
Travel Charger ACP-12X	0675296
Travel Charger ACP-12U	0675303
Travel Charger ACP-12UB	0675293
Travel Charger ACP-12G	0675295
Travel Charger ACP-12C	0675297
Travel Charger ACP-12A	0675300

Travel Charger ACP-12AR	0675298
<b>Portable and Office Accessories</b>	<b>Product code:</b>
Boom Headset HDB-4	0694094
Stereo Headset HDS-3	0694093
HS-5 Headset	0694121
Inductive Loopset LPS-4	0630443
Camera Headset HS-1C	0694124
Connectivity Adapter Cable DKU-5	0730235
Carrying Strap MBA-8 (Eur/Afr inbox only)	0720341
<b>Xpress -On shells:</b>	
Blue SKR-337	0262919
Red SKR-338	0262920
Orange SKR-339	0262921
Dark Grey SKR-343	0262993
Green SKR-344	0262994
Dark Green SKR-340	0262922
<b>Mobile Accessories</b>	<b>Product code:</b>
Headrest Handsfree BHF-1	0694102
Mobile Charger LCH-9	0675120
Mobile Charger LCH-12	0675328

## Technical Specifications

### General Specifications of Transceiver NPM-6/6X

Unit	Dimensions (mm) (W x H x D)	Weight (g)	Volume (cm <sup>3</sup> )
Transceiver with BL-4C 720mAh Li-Ion battery pack	108.5 x 49.5 x 22	104	89

Parameter	Unit
Cellular System	EGSM900, GSM1800 and GSM1900
RX Frequency Band	EGSM900: 925 - 960 MHz GSM1800: 1805 - 1880 MHz GSM1900: 1930 - 1990 MHz
TX Frequency Band	EGSM900 : 880 - 915 MHz GSM1800: 1710 - 1785 MHz GSM1900: 1850 - 1910 MHz
Output Power	EGSM900 : +5 ...+33 dBm / 3.2 mW ... 2 W GSM1800: +0 ...+30 dBm / 1.0 mW ... 1 W GSM1900: +0 ...+30 dBm / 1.0 mW ... 1 W
Number of RF Channels	EGSM900: 174 GSM1800: 374 GSM1900: 300
Channel Spacing	200 kHz
Number of TX Power Levels	EGSM900 : 15 GSM1800: 16 GSM1900: 16
Typical receiver sensitivity, static channel	-106 dBm, EGSM900 TCH/FS at 2%BER -106 dBm, GSM1800 TCH/FS at 2%BER -107 dBm, GSM1900 TCH/FS at 2%BER

## Battery endurance

Parameter	Hours	Note
talk time (hours)	up to 2-5	
standby (hours)	up to 150-300	Depends on network parameters
standby time: radio + HDS-3	up to 20 hours	
standby time: radio + IHF	up to 8 hours	

## Environmental conditions

Table 1: Allowed Ambient Temperatures

Environmental condition	Ambient temperature	Notes
Normal operation	-10 °C ... +55 °C	Specifications fulfilled
Reduced performance	+55 °C ... +65 °C	Operational only for short periods
Intermittent operation	-20 °C ... -10 °C and +65 °C ... +85 °C	Operation not guaranteed but an attempt to operate will not damage the phone
No operation	-40 °C ... -20 °C	Operation not possible but an attempt to operate will not damage the phone
No operation or storage	< -40 °C and > +85 °C	No storage; an operation attempt may cause permanent damage
Charging allowed	-25 °C ... +60 °C	
Long term storage conditions	0 °C ... +40 °C	

## Transceiver Features

Transceiver main HW parts / features include:

- GPRS
- Integrated Stereo FM radio with external audio amplifier
- Full graphic Colour Display
- Jack IV style UI with two soft keys
- Integrated IR link & internal data
- Internal vibra
- Internal Hands Free (IHF) Speaker
- Plug-in SIM card below the battery cover of the phone

- Back mounted antenna (no connection for external antenna)
- Mechanics has improved protection against splashes, dust and bumps
- Flashlight leds
- Pop-Port (TM) system connector and DC charging jack with improved protection against splashes and dust
- Bottom flap to protect connectors

**Data accessories**

- Data features
  - 9600, 14400 bps, non-transparent data
  - Multislot class 6 (max 2+2, 3+1 (rx time slots + tx time slots))
  - v.42 bis compression (if possible)
  - GPRS
    - Class B Mobile
    - Multislot class 6 (max 2+2, 3+1 (rx time slots + tx time slots))
    - V.42 bis compression for user data and Van Jacobsen for IP headers
- FAX features
  - 9600 bps
  - group 3
  - classes 1,2 and 2.0 supported
- IR link (IrDA compliant IrComm interface) up to 1.152 Mbit/s
  - IR link between two phones



## Electrical Characteristics

**Table 2: Absolute Maximum Ratings**

Parameter	Min.	Typical	Max.	Unit
Battery Voltage, Idle	-0.3		5.5	V
Battery Voltage, Call	-0.3		4.8	V
Charger Input Voltage	-0.3		16	V
Charging Current			850	mA

**Table 3: Supply Voltages**

Parameter	Min.	Typical	Max.	Unit / Notes
Battery Voltage	3.1	3.7	4.2	V / SW cut-off 3.1 V

**Table 4: Current Consumption**

Condition	Min.	Typical	Max.	Unit
Call (MoU) EGSM900 GSM1800 GSM1900		294 221 212		mA
Idle (MoU)		3-4		mA
Power off			50	μA

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