

NPM-6 Series Transceivers

General Information



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NPM-6 Product Selection

The NPM-6 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 Product and modules

| Name | Type code | Material code/ module type | Module code |
|------------------------------|-----------|-------------------------------|-----------------|
| Basic transceiver | NPM-6 | 0506417 | |
| Radio module | | AK4 | 0202004 |
| UI board | | KU4 | 0201898 |
| Mechanics assembly parts | | | 0262779 |
| Software module (basic SW) | | | On Flash memory |

Figure 1: NPM-6 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 |
| Portable and Office Accessories | Product code: |
| 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 |
| Xpress -On shells: | |
| 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 |
| Mobile Accessories | Product code: |
| Headrest Handsfree BHF-1 | 0694102 |
| Mobile Charger LCH-9 | 0675120 |
| Mobile Charger LCH-12 | 0675328 |

Technical Specifications

General Specifications of Transceiver NPM-6

| Unit | Dimensions (mm) (W x H x D) | Weight (g) | Volume (cm ³) |
|---|--------------------------------|---------------|------------------------------|
| 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 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 | μ A |

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