# Nokia Customer Care NHL-9, RM-69 Series Transceivers

# 2 - General Information





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#### NHL-9, RM-69

#### Nokia Customer Care

#### 2 - General Information

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### **Product Selection**

NHL-9/RM-69 is a triple band radio transceiver unit designed for the EGSM900, GSM1800 and GSM1900 networks. GSM power class is 4 and PCN power class is 1.

NHL-9/RM-69 product and modules

Name	Type code	
Basic transceiver	NHL-9/RM-69	
Radio module	TB6	

NHL-9 transceiver



RM-69 transceiver



## **Accessories Lists**

#### NHL-9 accessories list

Batteries	Туре
Semi-fixed Battery BL-5C	
Chargers	Туре
Performance Travel Charger (EUR)	ACP-12E
Performance Travel Charger (UK)	ACP- 12X
Performance Travel Charger (US) Made in country	ACP-12U
Performance Travel Charger (US) (Countries like Brazil/Portugal)	ACP- 12UB
Performance Travel Charger (US) (Countries like Brazil/Gradient)	ACP-12G
Performance Travel Charger (Korea)	ACP-12K
Performance Travel Charger (China)	ACP- 12C
Performance Travel Charger (Argentina)	ACP-12AR
Performance Travel Charger (Australia)	ACP-12A
Cigarette Lighter Charger 10.8 32 Vdc	LCH-9

Note! ACP-7, ACP-8 and ACP-9 chargers are also compatible with NHL-9  $\,$ 

Portable and Office Accessories	Туре
Boom Headset Made in China with English text Chinese label	HDB-4
Stereo Headset Chinese label	HDS-3
Loopset	LPS-4
Mobile Accessories:	Туре
Mobile Holder	MBC-13L
Swivel Mount	HHS-15
Handsfree Headrest	BHF-1
Car Kit 126 (Full Car Kit providing charging) Advanced HF Unit HFU-4 HF Microphone HFM-8 External HF Speaker HFS-12 Mounting Plate MKU-1 System Cable SCU-4 Power Cable PCU-4	CARK126
Privacy handset	HSU-3

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Other Accessories:	Туре
Connectivity Cable (FBUS /USB Cable)	DKU-5
PC Suite	

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Note! ACP-7, ACP-8 and ACP-9 chargers are also compatible with RM-69	
Audio	Туре
Wireless Headset	HDW-3
Wireless Headset	HS-11W
Wireless Clip-on Headset	HS-21W
Wireless Boom Headset	HS-4W
Wireless Image Headset	HS-13W
Boom Headset	HDB-4
Headset	HS-5
Inductive Loopset	LPS-4
TTY Adapter	HDA-10
Car	Туре
Car Kit Phone	N616
Wireless Car Kit	CK-1W
Advanced Car Kit	CK-7W
Car Kit	CK-10
Antenna Coupler	AXF-15S

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Car	Туре
Mobile Holder	MBC-15S
Plug-in Car Handsfree	HF-3
Headrest Handsfree	BHF-3
Data	Туре
Connectivity Adapter Cable	CA-42
Connectivity Stand	DCV-14
Imaging	Туре
Remote Camera	PT-6
Image Album	PD-1
Messaging	Туре
Digital Pen	SU-1B

# **Technical Specifications**

#### General specifications of transceiver

Unit	Dimensions (mm)	Weight	Volume
	(L x W x T)	(g)	(cm <sup>3</sup> )
NHL-9 or RM-69 transceiver with BL-5C battery pack	46mm x 106mm x 21.6mm	100	79

#### **Battery endurance**

Nokia measurements of the operational times in GSM 900/1800 and GSM 1900 are:

Battery	Talk time	Stand-by time	
BL-5C	up to 3-8 hours	up to 14 days	

Note! Variation in operating times may occur depending on the product, SIM card, network and usage settings, usage style and environments. Talk time is increased by up to 30%, if half rate is active, and reduced by 5%, if enhanced full rate is active.

#### **Environmental conditions**

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 °C10 °C and +65 °C +80 °C	Operation not guaranteed but an attempt to operate will not damage the phone
No operation	-40 °C20 °C	Operation not possible but an attempt to operate will not damage the phone
No operation or storage	$<$ -40 $^{\circ}$ C and $>$ +80 $^{\circ}$ 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:

- Triple band EGSM900/GSM1800/GSM1900
- Bluetooth
- Matrix colour display
  - NHL-9: passive matrix colour display 4096 colours (128 x 128 pixels used in applications i.e. Series 40)
  - RM-69: active matrix colour display 65k colours (130 x 130 pixels used in applications i.e. Series 40)
- 5-way joystick
- ITU-T keypad and full alphanumeric keyboard
- Internal antenna
- Internal vibra
- Integrated handsfree
- Speech Codecs: HR, FR, EFR, AMR
- Real time clock
- Pop-Port<sup>TM</sup> System Connector
- Camera
  - NHL-9: CIF camera
  - RM-69: VGA camera

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#### **Electrical characteristics**

#### Absolute maximum ratings

Parameter	Min.	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

### Supply voltages

Parameter	Min.	Typical	Max.	Unit / Notes
Battery Voltage	3.1	3.6	4.2	V / SW cut-off 3.2 V

#### **Current consumption**

Condition	Min.	Typical	Max.	Unit
Call (MoU) EGSM 900 GSM 1800 GSM 1900		237 172 172		mA
Idle (MoU)		3-4		mA
Power off			50	μΑ

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