

	Nokia 9000 Communicator				Nokia 9110 Communicator				Nokia 9210 Communicator				Nokia 9300			Nokia 9500 Communicator		Nokia E90 Communicator		Nokia E7
	9000	9000e	9000i	9000ii	9110	9110i	9210	9290	9210i	9210c	9300	9300b	9300i	9500	9500b	E90	E7-00			
Release Date	Aug 1996	Jun 1997	Oct 1997	Jul 1998	Sep 1998	Jan 1999	Jun 2001	Jun 2002	May 2002	Jul 2005	Jan 2006	Mar 2006	Feb 2005	Jan 2006	Jun 2007	Feb 2011				
Internal Code	RAE-1(N)	RAB-1(N)	RAE-4(N)	RAB-4(NX)	RAE-2	RAE-2i	RAE-3(N)	RAB-3(N)	RAE-5(N) RAE-3(N)	RAE-6	RA-4	RA-8	RA-2	RA-3	RA-6 / RA-7	RM-626				
Dimensions	173 x 64 x 38 mm				158 x 56 x 27 mm				158 x 56 x 26.9 mm				132 x 51 x 21.1 mm		148 x 56 x 23.6 mm		132 x 57 x 20 mm		62.4 x 123.7 x 13.6 mm	
Volume	420.7 ccm				238.9 ccm				238 ccm				142 ccm		195.6 ccm		150.5 ccm		105 ccm	
Mass (battery included)	397 gr				253 gr				244 gr				167 gr		222 gr		176 gr		176 gr	
Operating System	GeoWorks GEOS V3.0 Nokia GUI				GeoWorks GEOS V3.0 Nokia GUI				Symbian OS 6.0 Series 80 1st Edition (EPOC R6) (Crystal) - Chinese				Symbian OS 7.0 Series 80 2nd Edition			Symbian OS 7.0 Series 80 2nd Edition		Symbian OS 9.2 Series 60 3rd Edition Feature Pack 1		Symbian OS Symbian^3 (Series 60 5.2)
Kernel	DOS 3.0 (32 bit version)				DOS 3.0 (32 bit version)				Symbian 6.0				Symbian 7.0s			Symbian 7.0s		Symbian 9.2		Symbian
CPU-Clock	24 MHz				33 MHz				52 MHz				150 MHz			332 MHz		332 MHz		680 MHz
CPU	Intel 386EX (32 bit)				AMD Elan SC450 486 (32 bit)				ARM920T (32 bit)				Texas Instruments OMAP 1510 (32 bit)			Texas Instruments OMAP 1510 (32 bit)		Texas Instruments OMAP 2420 (32 bit)		ARM 1136JF-S (32 bit)
Core	Intel 80386				AMD Am486				ARM9TDMI				ARM925T (TI-enhanced)			ARM925T (TI-enhanced)		ARM1136		ARM11
Level-1 Cache	Not supported				Not supported				16 KiB data cache / 16 KiB instruction cache				8KiB data cache / 16 KiB instruction cache			8KiB data cache / 16 KiB instruction cache		32 KiB data cache / 32 KiB instruction cache		16 KiB data cache / 16 KiB instruction cache
Instruction Set	x86 (386)				x86 (386)				ARMv4T (ARM9-based RISC)				ARMv4T			ARMv4T		ARMv6		ARMv6
RAM Type	EDO DRAM				EDO RAM				SDRAM				SDRAM			SDRAM		SDRAM		SDRAM
RAM Capacity	4 MiB				4 MiB				8 MiB				64 MiB			64 MiB, 39.6MiB accessible		128 MiB, 110MiB accessible		256 MiB
ROM Type	EPROM				EEPROM				Flash EEPROM				Flash EEPROM			Flash EEPROM		Flash EEPROM		Flash EEPROM
ROM Capacity	4 MiB (accessible: 2 MiB)				4 MiB (accessible: 2 MiB)				16 MiB, 2MiB accessible 32 MiB, 16MiB accessible				128 MiB (user-accessible) 79.83MiB non-volatile storage			128 MiB (user-accessible) 79.83MiB non-volatile storage		256 MiB (user-accessible) 136 MiB non-volatile storage		1 GiB (accessible: 350 MiB) + 15.3 GiB
Display Type	backlit monochrome STN				backlit monochrome STN				color transfective TFT, 12 bit/pixel (4096 scales)				color transfective TFT display			color transfective TFT display		color transfective TFT display		color Active Matrix OLED display
Display Color Depth	2 bit/pixel (4 scales)				3 bit/pixel (8 scales)				12 bit/pixel (4096 scales)				16 bit/pixel (65,536 scales)			16 bit/pixel (65,536 scales)		24 bit/pixel (16,777,216 scales)		24 bit/pixel (16,777,216 scales)
Display Diagonal	4.5" (115 mm)				4.5" (115 mm)				4.5" (115 mm)				4.1" (103 millimetres)			4.5" (114.5 mm)		3.9" (99 mm)		4" (101 mm)
Display Resolution	640 x 200 (128,000 pixels)				640 x 200 (128,000 pixels)				640 x 200 (128,000 pixels)				640 x 200 (128,000 pixels)			640 x 200 (128,000 pixels)		800 x 352 (281,600 pixels)		360 x 640 (230,400 pixels)
Viewable Display Size	4.32" x 1.35" (109.77 x 34.3 mm)				4.32" x 1.35" (109.77 x 34.3 mm)				4.32" x 1.35" (109.77 x 34.3 mm)				3.87" x 1.21" (98.31 x 30.72 mm)			4.3" x 1.34" (109.29 x 34.15 mm)		3.57" x 1.57" (90.62 x 39.87 mm)		1.95" x 3.47" (49.52 x 88.03 mm)
Pixel Density	148.1 pixel/inch (0.17151 mm/px)				148.1 pixel/inch (0.17151 mm/px)				148.1 pixel/inch (0.17151 mm/px)				165.4 pixel/inch (0.15361 mm/px)			148.7 pixel/inch (0.17076 mm/px)		224.2 pixel/inch (0.11327 mm/px)		184.7 pixel/inch (0.13755 mm/px)
Secondary Display Type	backlit monochrome STN				backlit monochrome STN				backlit monochrome STN display				color transfective TFT display			color transfective TFT display		color transfective TFT display		Not supported
- Color Depth	1 bit/pixel (2 scales)				1 bit/pixel (2 scales)				1 bit/pixel (2 scales)				16 bit/pixel (65,536 scales)			16 bit/pixel (65,536 scales)		24 bit/pixel (16,777,216 scales)		Not supported
- Diagonal	1.3" (33 mm)				1.3" (33 mm)				1.5" (39 mm)				1.5" (39 mm)			1.5" (39 mm)		2" (52 mm)		Not supported
- Resolution	50 x 38 (1900 pixels)				80 x 48 (3840 pixels)				84 x 48 (4032 pixels)				128 x 128 (16,384 pixels)			128 x 128 (16,384 pixels)		240 x 320 (76,800 pixels)		Not supported
Audio Channel	mono sound				mono sound				mono sound				stereo sound			stereo sound		stereo sound		stereo sound
Microphone	mono sound				mono sound				mono sound				mono sound			mono sound		mono sound		mono sound
Loudspeaker	mono sound				mono sound				mono sound				mono sound			mono sound		stereo sound		mono sound
Audio Output	Proprietary plug				Proprietary plug				Proprietary plug				Proprietary plug			Proprietary plug		2.5 mm plug		3.5 mm plug
Cellular Networks	GSM 900 DCS 1800 (GSM 1800) GSM 900 PCS 1900 (GSM 1900)				GSM 900 CSD (14.4 kbit/s) Open-out antenna				GSM 900 / DCS 1800 PCS 1900 (GSM 1900) CSD / HSCSD (43.2 kbit/s) Open-out antenna				GSM 900, -1800, -1900 GSM 850, -1800, -1900 GSM 900, -1800, -1900			GSM 900, -1800, -1900 GSM 850, -1800, -1900		GSM 850, -900, -1800, -1900, UMTS 2100 CSD, HSCSD, GPRS, EDGE, UMTS, HSDPA (3.6)		GSM 850, -900, -1800, -1900, UMTS S850, -900, -1700, -1900, -2100 CSD, HSCSD, GPRS, EDGE, UMTS, HSDPA, HSUPA (10.2 / 2.0)
Cellular Data-Links	CSD (9.6 kbit/s)				CSD (9.6 kbit/s)				CSD / HSCSD (43.2 kbit/s)				CSD, HSCSD, GPRS, EDGE			CSD, HSCSD, GPRS, EDGE		CSD, HSCSD, GPRS, EDGE, UMTS, HSDPA (3.6)		CSD, HSCSD, GPRS, EDGE, UMTS, HSDPA, HSUPA (10.2 / 2.0)
Antenna	Open-out antenna				Open-out antenna				Open-out antenna				Internal antenna			Internal antenna		Internal antenna		Internal antenna
Call + Alert	1 -chord melody (monophonic)				1 -chord melody (monophonic)				1 -chord melody				40 -chord melody			40 -chord melody		64 -chord melody (polyphonic)		64 -chord melody (polyphonic)
Vibrating Alert	Not supported				Not supported				Not supported				Not supported			Not supported		Supported		Supported
Speakerphone	Supported				Supported				Supported				Supported			Supported		Supported		Supported
Positioning Device	Not supported				Not supported				Not supported				Pointing Stick			Pointing Stick		Not supported		Multi-touch screen
Primary Keyboard	Built-in QWERTY-type keyboard, 74 keys				Built-in QWERTY-type keyboard, 74 keys				Built-in QWERTY-type keyboard, 74 keys				Built-in QWERTY-type keyboard, 66 keys			Built-in QWERTY-type keyboard, 68 keys		Built-in QWERTY-type keyboard, 65 keys		Slide and tilt QWERTY-type keyboard, 42 keys
Secondary Keyboard	Built-in numeric phone keyboard, 21 keys				Built-in numeric phone keyboard, 21 keys				Built-in numeric phone keyboard, 20 keys				Built-in numeric phone keyboard, 16 keys			Built-in numeric phone keyboard, 16 keys		Built-in numeric phone keyboard, 18 keys		On-screen alphanumeric keypad
Directional Pad	Four-way (without action button)				Four-way (without action button)				Four-way (without action button)				Four-way (with action button)			Four-way (with action button)		Four-way (with action button)		Four-way (without action button)
Scroll Wheel	Not supported				Not supported				Not supported				Not supported			Not supported		Not supported		Not supported
Expansion Slot	Not supported				Multi Media Card				1 GiB Multi Media Card				2 GiB MMC			2 GiB MMC		16 GiB SD 2.0/HC (microSD, -HD, TransFlash, SDIO)		Not supported
USB	Not supported				Not supported				Not supported				USB 2.0, Full-Speed 12Mbit/s (Proprietary connector)			USB 2.0, Full-Speed 12Mbit/s (Proprietary connector)		USB 2.0, Full-Speed 12Mbit/s (USB Series Mini-B)		USB 2.0 host/client, Hi-Speed 480 Mbit/s, OTG 1.3 (USB Series Micro-B)
Bluetooth (802.15)	Not supported				Not supported				Not supported				Bluetooth 1.1			Bluetooth 1.1		Bluetooth 2.0 + EDR		Bluetooth 3.0
Wireless LAN / Wi-Fi (802.11)	Not supported				Not supported				Not supported				Not supported			IEEE 802.11g, 54 Mbit/s		IEEE 802.11b, 11 Mbit/s		IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
Infrared	IrDA 1.0, 115200bit/s (SIR/CIR)				IrDA 1.1, 115200bit/s (SIR/CIR)				IrDA 1.1, 115200bit/s (SIR/CIR)				IrDA 1.1, 115200bit/s (SIR/CIR)			IrDA 1.2, 115200bit/s (SIR/CIR)		IrDA 1.1, 115200bit/s (SIR/CIR)		IrDA 1.2, 115200bit/s (SIR/CIR)
Serial (UART)	RS-232, 115200 bit/s (Proprietary connector)				RS-232, 115200 bit/s (Proprietary connector)				RS-232, 115200 bit/s (Proprietary connector)				RS-232, 115200 bit/s, Proprietary connector			RS-232, 115200 bit/s, Proprietary connector		RS-232, 115200 bit/s, Proprietary connector		RS-232, 115200 bit/s, Proprietary connector
Analog Radio	Not supported				Not supported				Not supported				Not supported			Not supported		FM radio (87.5-108 MHz) radio receiver		FM radio (76-108MHz) with RDS radio receiver
Digital-Media-Broadcast	Not supported				Not supported				Not supported				Not supported			Not supported		Not supported		Not supported
Built-in GPS Module	Not supported				Not supported				Not supported				Not supported			Not supported		NMEA 0183		NMEA 0183
Complementary GPS Services	Not supported				Not supported				Not supported				Not supported			Not supported		Assisted GPS		Assisted GPS
Built-in accelerometer	Not supported				Not supported				Not supported				Not supported			Not supported		Not supported		Supported
Built-in Main Camera	Not supported				Not supported				Not supported				Not supported			CMOS 640 x 480 pixels (0.31 MP)		CMOS 2048 x 1536 pixels (3.15 MP)		CMOS 3264 x 2448 pixels (7.99 MP)
Autofocus (AF)	Not supported				Not supported				Not supported				Not supported			Not supported		Supported		Supported
Built-in Flash	Not supported				Not supported				Not supported				Not supported			Not supported		mobile light (LED)		mobile light (LED)
Camcorder	Not supported				Not supported				Not supported				Not supported			176x144 pixels		640 x 480 pixels, 30 frame/sec		1280 x 720 pixels, 30 frame/sec
Secondary Camera	Not supported				Not supported				Not supported				Not supported			Not supported		CMOS 352 x 288 pixels (0.1 MP)		CMOS 640 x480 pixels (0.31 MP)
Battery Technology	Lithium-ion battery				Lithium-ion battery				Lithium-ion battery				Lithium-ion polymer battery			Lithium-ion battery		Lithium-ion battery		Lithium-ion polymer battery
Battery Build	removable				removable				removable				removable			removable		removable		non-removable
Estimated Batterylife	30 hours				40 hours 45 hours				9 hours				7 hours 8 hours			12 hours		12 hours		9 hours
Battery Capacity	800 mAh				1000 mAh 1100 mAh				1300 mAh				970 mAh 1100 mAh			1500 mAh		1500 mAh		1200 mAh