



M3000 series Mobitex Radio Modem for OEM applications

The M3000 series Mobitex Radio Modem consists of two products, M3090 and M3080 for 900 and 800 MHz operation. Based on Ericsson's world-leading wireless technology and its most advanced mobile telephone platform, the M3000 series sets new standards for high performance, compact size and low power consumption.

Specifically designed for high-volume/low-cost products, the M3000 series is easily integrated into new devices. Because radio functions use only a fraction of the M3000 series processor and memory capacity, it is able to support embedded Java applications, making it extremely versatile.

With this new product, Ericsson is also providing more than a radio modem. Integrated GPS and Bluetooth modules are available as options, while an I2C bus allows the modem to control other hardware. These features make the M3000 series a unique product and the ideal choice for a new generation of OEM products with unprecedented functionality.

Technical specification

- Mobitex Radio Modem M3000 series

Physical	
Design	PCB board without any extra casing
Weight	40 g
Dimensions	102,9 × 46,4 mm

Input power	
Input voltage	V. 7.2-1.2/+1.8 VDC
Current consumption:	
Transmit peak	1.6 A
Receive mode	120 mA
Stand by	4.9 mA

System Connector	
Type	ODU-Minifix 30pin header 1.27 × 2.54 mm
Serial interface electrical level	3.3 V Cmos Technology

Temperature	
Operating	-25 to +65C
Storage	-40 to +70C

Relative humidity	
Operating	5 - 95%
Storage	5 - 95%

Terminal/Host interface	
Interface communication	MASC protocol
Data transfer rate	9.6, 19.2

Antenna Connector	
Type	M/A-Com SSMT
Impedance	50 Ohm

Onboard Application Support	
I/O Ports	-5 Digital I/O -2 Analog I/O
I ² C	320 kHz
Serialport	

Radio specifications	
Data transfer rate	8 kbps (gross rate)
Transmitter output	2 W
Transmitter power control	Attenuation in 7 steps 0, -3, -6, -9, -12, -15, -18, dB
Receiver sensitivity	-121 dBm
Channel selection	Automatic roaming
Modulation	Modified GMSK type
Frequency stability	Better than ± 1.35 kHz

Frequency M3090	
Transmitting	896 - 902 MHz
Receiving	935 - 941 MHz

Frequency M3080	
Transmitting	819 - 825 MHz
Receiving	864 - 870 MHz

