

GoEmbedded E1000

Embedded Cellular Modem

for GSM/GPRS/EDGE/UMTS/HSDPA/HSPA+

Robustel GoEmbedded E1000 is an embedded, ready-to-integrate communications module offering state-of-the-art GSM/GPRS/EDGE/UMTS/HSDPA/HSPA+ connectivity for machine to machine (M2M) applications. This quick-to-market communications module allows developers to add wireless communication to products with a minimum of development time and expense.

Key Features

- Control via AT commands (Hayes 3GPP TS 27.007 and 27.005).
- PPP, GPRS, SMS, CSD access via AT commands.
- Internet Services TCP server/client, UDP access via AT commands.
- TTL/USB interfaces for communications, both can be controlled via AT commands.
- 50-PIN socket with 3 mounting holes, compact size and easy to integrate.
- SSL optional for specified model.
- Built-in **Java™** optional for specified model.



Applications

- POS, ATM, Kiosks, Vending Machines
- Healthcare
- Metering

Regulatory and Type Approvals

- Approval and Detective: CE, R&TTE, RoHS, WEEE

Specifications

Cellular Interface

- Standards: GSM/GPRS/EDGE/UMTS/HSDPA/HSPA+
- GPRS: max. 86 kbps (DL & UL), class 10
- EDGE: max. 236.8 kbps (DL & UL), class 12
- UMTS: max. 384 kbps (DL & UL)
- HSDPA: max. 3.6 Mbps/384 kbps (DL/UL)
- HSPA+: max. 14.4/5.76 Mbps (DL/UL)
- Frequency: 850/900/1800/1900 MHz for GPRS/EDGE, 900/2100 MHz or 850/900/1900/2100 MHz for UMTS/HSDPA/HSPA+
- Antenna Interface: One Hirose U.FL antenna connector
- SIM Card Holder: Does not include

Serial Interface

- Baudrate: 8N1, 600bps to 230400bps, autobauding
- UART0: Tx, Rx, RTS, CTS, DTR, DSR, DCD, Ring
- UART1: Tx, Rx, RTS, CTS

USB Interface (only for E1000-3H & E1000-3P)

- Number of Ports: 1 x USB 2.0 (Full Speed 12Mbit/s)

Power Supply

- Input Voltage: 3.3 to 4.2 VDC (E1000-3H & E1000-3P)
3.3 to 4.5 VDC (Other models)

Physical Characteristics

- Dimension (L x W x H): 51 x 35 x 10 mm (E1000-2G)
51 x 37 x 10 mm (Other models)
- Installation: 50-PIN socket
- Weight: Approx. 20g

Selection and Ordering Data

Model No.	Description	Power Consumption
E1000-2G	2 ports UART (TTL level), GPRS Class 10, -40 to 85°C	2.1 mA (Sleep), 200 mA (GSM/CSD), 180 mA (GPRS Class 10), 330 mA (GPRS Class 12), average values for average GSM field strength
E1000-2E	2 ports UART (TTL level), GPRS/EDGE Class 12,SSL, -40 to 75°C	
E1000-2J	2 ports UART (TTL level), GPRS Class 12, SSL/Java, -40 to 75°C	
E1000-3H	1 port UART(TTL level) and 1 port USB, GPRS/EDGE/UMTS/HSDPA, -20 to 70°C	3mA (Sleep), 340mA(Speech), 360mA (HSDPA&HSPA+), 550mA(GPRS)
E1000-3P	1 port UART(TTL level) and 1 port USB, GPRS/EDGE/UMTS/HSPA+, -20 to 70°C	

Packing List

- Robustel E1000 Modem
- Terminal Block for Power Connector
- Document and Software CD

SIM_CLK	1	o		o	50	NC	SIM_CLK	1	o		o	50	NC
SIM_VCC	2	o		o	49	NC	SIM_VCC	2	o		o	49	NC
SIM_IO	3	o		o	48	NC	SIM_IO	3	o		o	48	NC
SIM_RST	4	o		o	47	NC	SIM_RST	4	o		o	47	NC
NC	5	o		o	46	NC	NC	5	o		o	46	NC
SIM_GND	6	o		o	45	NC	SIM_GND	6	o		o	45	NC
NC	7	o		o	44	NC	NC	7	o		o	44	NC
GND	8	o		o	43	NC	GND	8	o		o	43	NC
NC	9	o		o	42	GND	USB_D-	9	o		o	42	GND
NC	10	o	E1000 2G/2E/2J	o	41	ON	USB_D+	10	o	E1000 3H/3P	o	41	ON
NC	11	o	Bottom View	o	40	EMERG_RST	NC	11	o	Bottom View	o	40	EMERG_RST
NC	12	o		o	39	DCD0	NC	12	o		o	39	DCD0
LPG	13	o		o	38	NC	LPG	13	o		o	38	NC
RXD1	14	o		o	37	CTS0	NC	14	o		o	37	CTS0
RXD0	15	o		o	36	NC	RXD0	15	o		o	36	NC
TXD1	16	o		o	35	DTR0	NC	16	o		o	35	DTR0
TXD0	17	o		o	34	RTS0	TXD0	17	o		o	34	RTS0
VDD_RTC	18	o		o	33	DSR0	VDD_RTC	18	o		o	33	DSR0
NC	19	o		o	32	RING0	NC	19	o		o	32	RING0
NC	20	o		o	31	VDD_IO	NC	20	o		o	31	VDD_IO
GND	21	o		o	30	VBATT+	GND	21	o		o	30	VBATT+
GND	22	o		o	29	VBATT+	GND	22	o		o	29	VBATT+
GND	23	o		o	28	VBATT+	GND	23	o		o	28	VBATT+
GND	24	o		o	27	VBATT+	GND	24	o		o	27	VBATT+
GND	25	o		o	26	VBATT+	GND	25	o		o	26	VBATT+

Optional Accessories (can be purchased separately)

- Double Row Straight Female Header
- U.FL connector RF cable with SMA female connector
- SMA male Rubber Antenna
- 4 x Spacers M2, 4 x Screws M2, 4 x Hexagon Nuts M2
- Push to Push SIM Card Holder
- DB9 Female Socket

Contact:

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