

Quectel GSM Module Family

Product	M10	M12	M20	M72	M75	M80	M95
Appearance							
Picture							
Packaging	64-pin SMD Quad-band module	64-pin SMD Dual-band module	50-pin B2B Connector Quad-band module	30-pin SMD Dual-band module	30-pin SMD Dual-band module	110-pin SMD Quad-band module	42-pin SMD Quad-band module
General Features							
Radio Bands (MHz)	850/ 900/ 1800/ 1900	900/ 1800	850/ 900/ 1800/ 1900	900/ 1800	900/ 1800	850/900/1800/1900	850/ 900/ 1800/ 1900
GPRS Multi-slot Class	Class: 12/10/8	Class: 12/10/8	Class: 12/10/8	Class: 12/10/8	No	Class:12/10/8	Class: 12/10/8
Operating Temperature Range	-40 °C to +85 °C	-40 °C to +80 °C	-45 °C to +85 °C	-40 °C to +80 °C	-40 °C to +80 °C	-45 °C to +85 °C	-40 °C to +85 °C
Dimensions	29mm×29mm×3.6mm	29mm×29mm×3.6mm	35mm×32.5mm×2.95mm	27.5mm×24mm×3.6mm	27.5mm×24mm×3.6mm	23mm×25mm×2.6mm	19.9mm×23.6mm×2.65mm
Weight	6 g	6 g	6 g	4 g	4 g	3 g	3 g
Certificates							
Certificates	CE/GCF/FCC/PTCRB/IC/ANATEL/NORM/ TA COFETEL/ICASA/NCC	CE	CE/TA	CE	CE	CE	CE/FCC/IC/NCC
Network Protocols							
PPP	Yes	Yes	Yes	Yes	No	Yes	Yes
TCP/UDP	Yes	Yes	Yes	Yes	No	Yes	Yes
HTTP	Yes	Yes	Yes	Yes	No	Yes	Yes
FTP	Yes	Yes	Yes	Yes	No	Yes	Yes
MMS	Yes	Yes	Yes	No	No	Yes	No
SMTP	Yes	Yes	Yes	No	No	Yes	No
Specifications for SMS via GSM / GPRS							
SMS Support	Point-to-point MO & MT SMS cell broadcast Text and PDU mode	Point-to-point MO & MT SMS cell broadcast Text and PDU mode	Point-to-point MO & MT SMS cell broadcast Text and PDU mode	Point-to-point MO & MT SMS cell broadcast Text and PDU mode	Point-to-point MO & MT SMS cell broadcast Text and PDU mode	Point-to-point MO & MT SMS cell broadcast Text and PDU mode	Point-to-point MO & MT SMS cell broadcast Text and PDU mode
Specifications for voice							
Speech Codec Modes	HR, FR, EFR, AMR	HR, FR, EFR, AMR	HR, FR, EFR, AMR	No	No	HR,FR, EFR,AMR	HR, FR, EFR, AMR
Echo Arithmetic	Echo Cancellation Echo Suppression Noise Reduction	Echo Cancellation Echo Suppression Noise Reduction	Echo Cancellation Echo Suppression Noise Reduction	No	No	Echo Cancellation Echo Suppression Noise Reduction	Echo Cancellation Echo Suppression Noise Reduction
Specifications for Fax and Data transmission							
GPRS Class 12	max. 85.6 kbps (uplink & downlink)	max. 85.6 kbps (uplink & downlink)	max. 85.6 kbps (uplink & downlink)	max. 85.6 kbps (uplink & downlink)	No	max. 85.6 kbps (uplink & downlink)	max. 85.6 kbps (uplink & downlink)
Fax	Group 3, Class 1 & 2	Group 3, Class 1 & 2	Group 3, Class 1 & 2	No	No	Group 3, Class 1 & 2	Group 3, Class 1 & 2
CSD	Up to 14.4 kbps	Up to 14.4 kbps	Up to 14.4 kbps	Up to 14.4 kbps	Up to 14.4 kbps	Up to 14.4 kbps	Up to 14.4 kbps
Interfaces							
External SIM	3V/ 1.8V	3V/ 1.8V	3V/ 1.8V	3V/ 1.8V	3V/ 1.8V	3V/ 1.8V	3V/ 1.8V
Audio Analog Interfaces	Two channels	Two channels	Two channels	No	No	Two input channels Three output channels	Two channels
Audio Digital PCM Interface	No	No	Yes	No	No	Yes	No
RTC Backup	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I ² C	No	Yes (in OpenCPU)	No	No	No	Yes (in OpenCPU)	No
Keypad Interface ¹	No	Yes (in OpenCPU)	No	No	No	Yes (in OpenCPU)	No
LCD Interface ¹	No	No	No	No	No	Yes (in OpenCPU)	No
Serial Interface	Three	Three	Two	Two	Two	Three	Two
Antenna Connector	No	No	Yes	No	No	No	No
Charging Interface	No	No	No	No	No	Yes	No
GPIOs	Yes	Yes	No	No	No	Yes (in OpenCPU)	No
SD Card Interface	Yes	Yes	No	No	No	Yes	No
Dual SIM Interface	No	No	No	No	No	Yes	No
OpenCPU							
OpenCPU Support	No	Yes	No	No	No	Yes	No
Camera							
CMOS Camera Interface	No	No	No	No	No	Yes	No
Recommended Applications ²							
Automatic Meter Reading	★	★	★	★★		★	★
Automotive	★	★	★	★		★	★
Sales and Payment	★	★	★	★		★	★
Security	★	★	★	★	★	★	★
Tracking and Tracing	★	★	★	★		★	★
Remote Maintenance and Control	★	★	★	★	★	★	★
Mobile Computing	★	★	★			★	★
Healthcare	★		★			★	★
Fixed Wireless Terminal	★	★★	★			★	★
Note: (1) Function is not provided in default firmware. (2)★: Recommended application; ★★: Enhanced feature or cost reduction for certain application.							