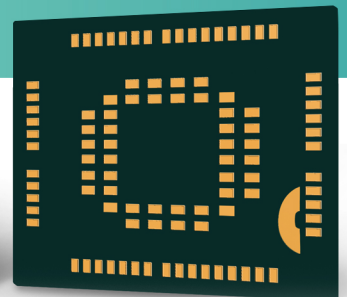# C1RM

C1RM is an LTE CAT NB-IoT/2G based Smart Cellular Module with 3GPP Release 13, that comes with an integrated eSIM. Designed for applications that require low power consumption and a small footprint, it is well suited for IoT applications such as smart city projects (smart metering, smart lighting, smart parking, waste management), emergency services, asset management, infrastructure maintenance and more.

Reimagining Cellular IoT Solutions

THE CAVLI ADVANTAGE

Integrated eSIM and global connectivity through Cavli Hubble™
Intelligent/Automatic local eSIM provisioning
Advanced firmware installation/update over the air
PAYG Global Data Subscription Model

FEATURES

Ultra low power consumption: 2µA in deep sleep mode
High carrier class network security

TECHNICAL SPECIFICATIONS

NB-IoT: B3/B5/B8/B20/B28
GPRS: 850/900/1800/1900
Standard: 3GPP Release 13
MQTT/MQTTS/CoAP/LwM2M – Yes, TLS 1.2 Supported
TCP/IP/HTTP/HTTPS/FTP - YES
Support Modes: In-Band, Guard Band, Standalone

DATA-CONNECTIVITY

NB-IoT: 62.5Kbps (UL), 25.5Kbps (DL)
GPRS: 85.6Kbps (UL), 85.6Kbps (DL)

PACKAGING

Dimension: 23.6 × 19.9 × 2.2 mm, LGA Package

TEMPERATURE RANGE

Normal working temperature: -20°C to +70°C
Limit working temperature: -40°C to +85°C
Storage temperature: -40°C to +90°C

INTERFACES

1.8V/3V SIM Interface
Operating Voltage: 3.6V to 4.2V; Typ 3.7V
1xSPI, 2xUART, 1xUSIM, 2xGPIO, 1xI2C, 1xADC, 1xANT

APPLICABLE REGIONS
Asia-Pacific, EMEA

TECHNICAL HIGHLIGHTS

PARAMETERS	NB-IoT	GPRS
BANDWIDTH	180 KHz	200 KHz
PEAK DATA RATE	<62.5 Kbps	<85.6 Kbps
UPLINK SPEED	62.5Kbps	85.6 Kbps
DOWNLINK SPEED	25.5 Kbps	85.6 Kbps
LATENCY	1.5-10 SEC	350 ms
BATTERY LIFE	10+ YEARS	10+ YEARS
PENETRATION	EXCELLENT	GOOD
VOICE	NO	NO

APPLICATIONS

Smart City   Energy & Utilities   Safety & Security   Manufacturing   Agriculture

Health Care/ E- Health   Retail   Smart Home

Cavli Hubble™

Cavli Hubble™ is our proprietary Connectivity as a Service (Caas) cloud platform for global cellular data subscription management, module & modem management, enabling businesses and industries to build and deploy easily scalable global wireless IoT solutions.