

DATA SHEET CHANGHONG AI-NB25 WIRELESS MODULE

KEY BENEFITS

Low cost through high integration by combining MCU, PMU, Flash, RAM, DSP, RF and other units in one module.

Small size combined with rich peripheral interface.

NETWORK

3GPP Protocol Stack Compliancy	Release 13
Support for TS.34 IoT Communication Efficiency	Supported
Wireless Protocol Support	
2G/GPRS	None
3G/UMTS	3G/UMTS None
4G/LTE	4G/LTE None
NB-IoT	Supported
Frequency Band Support	
2G Bands (MHz)	None
3G Bands (MHz)	None
4G Bands (MHz)	None
NB-IoT Bands (MHz)	B1, B2, B3, B4, B5, B8, B12, B13, B17, B18, B19, B20, B25, B26, B28, B66, B70, B71, B85
3GPP Classes / Categories	
CSD	None
GPRS Multislot Class (DL/UL)	None
EDGE Class (DL/UL)	None
HSDPA Category (DL)	None
HSUPA Category (UL)	None
LTE Category	None
NB-IoT Category	NB1
Short Message Service (SMS)	Supported
Speech Codecs	None
Firmware Updates	Via Serial Interface
Integrated Positioning Technology	
GPS	None
GLONASS	None
Control Plane A-GPS Support	None
SUPL A-GPS Support	None
Regulatory	
eCall	None
Standalone / Assisted GNSS	None
TTY	None

HARDWARE

Dimensions (L x W x H, mm)	27.6 x 18.8 x 2.7
Weight (g)	< 3
Operating Temperature – Extended Operation (°C)	-40 °C to +85
Supply Voltage Range (V)	2.1 – 3.63, 3.3 typ.
Interfaces	
USB 2.0 (480 Mbps)	None
ASC0 HS Serial Modem	None
GPIO Lines	32
UICC and U/SIM (1.8 V/3 V)	1.8 V, 3 V
ADC and I2C	ADC Supported
Serial Interfaces 1.8 V (including automatic baud rate detection)	Supported
Digital Audio, prepared for Analog Audio	None



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CERTIFICATION DETAILS

GMA Certification	None
Deutsche Telekom Certification Date (Initial Firmware)	12.09.2019 (NB25-JUI7.820.0349_V1.0)
Certified Deutsche Telekom Affiliates	AT, CZ, DE, HR, NL, PL, SK
Certifying Entity	DTAG IDU-TIV
DT Certification Type (Conditions)	Full
Deutsche Telekom Affiliate Country Codes	
AL	Telekom Albania
AT	T-Mobile Austria GmbH
CZ	T-Mobile Czech Republic a.s.
DE	Telekom Deutschland GmbH
GR	COSMOTE Mobile Telecommunications S.A.
HR	Hrvatski Telekom d.d.
HU	Magyar Telekom Telecommunications plc
ME	Comorgski Telekom a.d. Podgorica
MK	Makedonski Telekom AD – Skopje
NL	T-Mobile Netherlands B.B.
PL	T-Mobile Polska S.A.
RO	Telekom Romania Mobile Communications S.A.
SK	Slovak Telekom, a.s.



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