

Requirements for eSIM

[Main Page](#) > [Frequently Asked Questions - FAQ](#) > **Requirements for eSIM**

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Contents

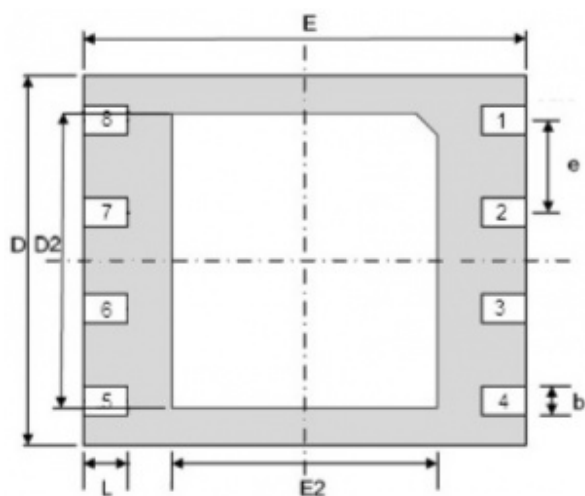
- [1 eSIM dimensions](#)
- [2 eSIM pin-out](#)
- [3 Requirements for eSIM packing reel:](#)
- [4 Compatibility with Teltonika FM devices](#)

An embedded-SIM (eSIM) or embedded universal integrated circuit card (eUICC) is a form of programmable SIM card that is embedded directly into a device. The surface mount format provides the same electrical interface as the full size, 2FF, and 3FF SIM cards, but is soldered to a circuit board as part of the manufacturing process. In machine to machine (M2M) applications where there is no requirement to change the SIM card, this avoids the requirement for a connector, improving reliability and security. An eSIM can be provisioned remotely; end-users can add or remove operators without the need to physically swap a SIM from the device.

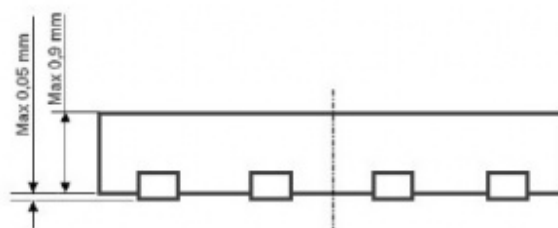
In order to use eSIM with Teltonika FM devices, some basic requirements must be met.

eSIM dimensions

Must match standard MFF2 eSIM size:



Parameter	Dimension (mm)	
	Typ	Max
E	6,00	6,15
D	5,00	5,15
L	0,6	0,7
b	0,4	0,5
E2	3,40	3,50
D2	4,20	4,30
e	1,27	



eSIM pin-out

There are two default eSIM pin-outs:

1	GND	GND
2	NC/IO	IO
3	IO/NC	NC
4	NC	NC
5	NC	NC
6	CLK	CLK
7	RST	RST
8	VDD	VDD

The only difference in pin-outs is the IO pin – 2 or 3. Both versions of pin-outs are suitable for devices with eSIM.

Requirements for eSIM packing reel:

13" in diameter.

Compatibility with Teltonika FM devices

Project	Current SIM configuration	Possibility to solder eSIM?	Possibility to have eSIM + another SIM?
FMB110/FMB120/ FMB130/ FMB140/FMB230/ FMB240	Micro SIM	Yes	Yes. Micro SIM + eSIM *
FMB122/FMB125/ FMB225	Dual Standard SIM	Yes	Yes. Standard SIM + eSIM *
FMU125/FMC125/ FMM125/FMC225	Dual Standard SIM	Yes	No
FMU126	Dual Micro SIM	Yes	No
FMU130/FMC130/ FMM130/ FMC230/FMM230	Micro SIM	Yes	No

FMB202/FMB204/FMB206	Micro SIM	Yes	Yes. Micro SIM + eSIM
FMB208/FMB209	Micro SIM	Yes	Yes. Micro SIM + eSIM
FMB900/FMB920	Micro SIM	Yes	Yes. Micro SIM + eSIM
FMB930	Micro SIM	Yes	Yes. Micro SIM + eSIM
FMB910	Micro SIM	Yes	No
FMC920/FMM920	Micro SIM	Yes	No
FMB965	Nano SIM	Yes	No
FMC640/FMM640	Dual Standard SIM	Yes	Yes. 2 x eSIM Possible
FMB640/FMB641	Dual Standard SIM	Yes	Yes. Standard SIM + eSIM
FMB001/FMB010	Micro SIM	Yes	Yes. Micro SIM + eSIM
FMB002/FMB020/FMB003	Nano SIM	No	-
FMM001/FMC001	Micro SIM	Yes	No
FMT100	Micro SIM	Yes. Special Hardware	No. Only 1 SIM type can be used (either eSIM or Micro SIM)
FMC003/FMM003	Micro SIM	Yes	No

*** - On special Request**