

Introducing emnify IoT SuperNetwork SatPlus

Converged cellular and satellite IoT connectivity now available with the emnify IoT SuperNetwork

As IoT expands exponentially, more businesses are relying on continuous data streams from devices deployed all over the globe, mobile and stationary, often in areas outside of the range of terrestrial cellular networks. SuperNetwork SatPlus offers converged cellular and satellite connectivity for uninterrupted connectivity enabling, new use cases in new geographies for IoT businesses.

What is SuperNetwork SatPlus?



Converged cellular and satellite connectivity on a single eSIM for uninterrupted IoT connectivity



Managed through a single provider, service, and platform, across cellular and satellite networks for lowered operational costs and increased operational efficiency



Compatible with 3GPP 5G Release 17 compliant cellular and satellite hybrid radio modules to enable reduced hardware costs



Flexible data plans for your IoT use cases, including data pooling across SIMs

How does SuperNetwork SatPlus work?

Easy setup and management

1

Insert the emnify satellite IoT eSIM into your hybrid cellular and NTN module equipped IoT device

2

Configure your devices via your IoT applications for seamless network switching

3

Manage cellular and satellite connectivity within the emnify connectivity management portal, or integrate into your systems via API



SuperNetwork SatPlus technical specifications

Coverage: USA, UK, EU, Switzerland, Japan, Australia and New Zealand

Complies with 5G NTN 3GPP Release 17 for NB-IoT over NTN connectivity with PSM and eDRX support

Radio frequencies: S-band 255, L-band 256/23
Min. SINR \geq -10 dB, Min. RSRP \geq -138 dBm

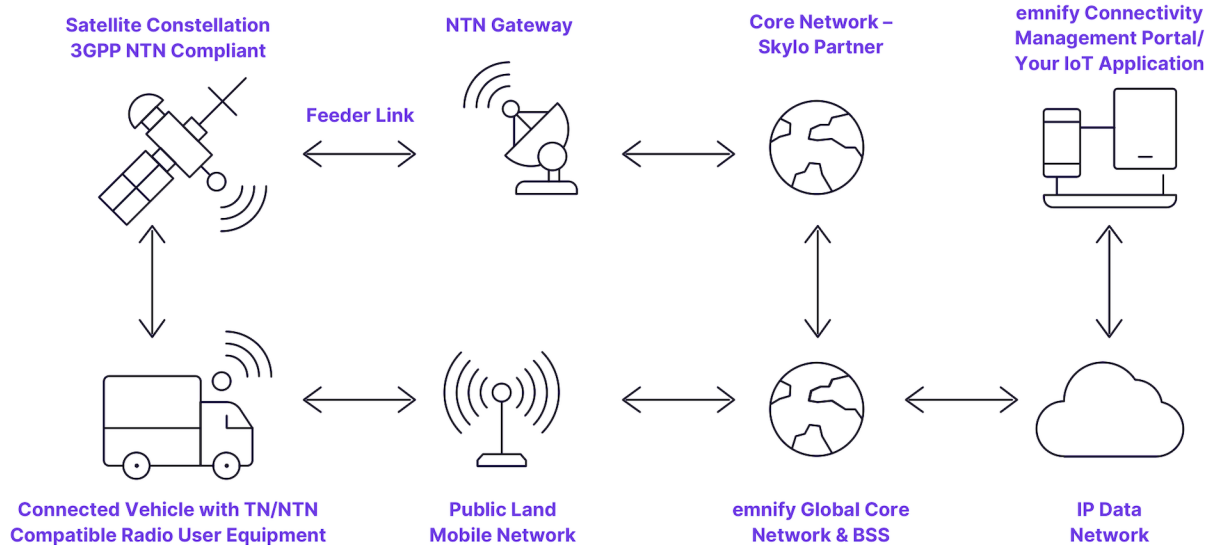
Transport layer: IPv4 data transport via UDP

Throughput and latency: Max. 20 transmissions per minute in UL/DL, MTU: 256 byte, 0.683 kbps

Latency: >0.5s, geostationary satellites

Converged satellite eSIM: single emnify eSIM facilitating converged cellular and satellite network service coverage

SuperNetwork SatPlus in action



SuperNetwork SatPlus opens up new markets and use cases



Asset tracking and monitoring

Assets such as vehicles and heavy equipment do not recognize the boundaries of traditional cellular networks and therefore leverage satellite to stay connected when outside of cellular range



Environmental monitoring

Satellite is important for a multitude of environmental monitoring use cases, including monitoring climate and pollution and predicting weather patterns. For example, utility companies often monitor weather patterns to predict their impact on the power grid



Remote operations management

In industries where facilities are periodically unmanned, satellite connectivity can play a role in enabling continuous, real-time monitoring and adjustment. Mining and Oil & Gas are great examples where operations often take place in remote or hazardous locations



Livestock and wildlife tracking

Satellite connectivity is increasingly employed in livestock and wildlife conservation for tracking animal movements and health. It allows for efficient management of livestock and monitoring of wildlife in remote areas with limited terrestrial network coverage



Agriculture

Used in agriculture for optimizing crop yield, satellite connectivity enables farmers to monitor key parameters like soil moisture and crop health remotely

SuperNetwork SatPlus Data Plans

Flexible, affordable converged cellular and satellite data plans

SatPlus 10	SatPlus 30	SatPlus 60
10MB cellular data per SIM per month	10MB cellular data per SIM per month	10MB cellular data per SIM per month
10 satellite messages per SIM per month	30 satellite messages per SIM per month	60 satellite messages per SIM per month
Data and message pooling across SIMs	Data and message pooling across SIMs	Data and message pooling across SIMs

*For adjusted data plans please scan the QR code below to have an IoT expert reach out to you

Compatible radio modules

Technical Specifications	
Frequency bands	Cellular RAN: LTE and 2G bands; Satellite RAN: B255, B256, B23
NTN / NB-IoT / LTE-M	Dual Mode LTE Cat-M1/NB2 (Release 14); 5G NB-IoT over NTN (Release 17)
2G/EDGE	Enhanced GPRS
Power saving	PSM, eDRX
GNSS	GPS
Transport Layer	IPv4 / UDP for satellite NTN connectivity
Output power	LTE Class 3: 23 dBm
Antenna gain	3 to 5 dBi
Carrier Certification	Skylo
Compatible hybrid modules available in 2024	Murata Type 1SC, Fibocom MA510-GL-33, Telit Cinterion ME910G1 / ME310G1 Quectel BG770A-SN / BG95-S5, Sierra HL7800 / HL7812, Simcom 7070G-HP-S

Customers interested in getting started with SuperNetwork SatPlus can learn more [here](#) or by scanning the QR code

