



## Technical Specifications

### TS-UNB System Parameters

Parameter	
Technology	Telegram Splitting – Ultra Narrow Band (TS-UNB)
Radio Frequency	Software configurable Standard frequencies – 868 MHz Europe, 915 MHz North America
Receiver Sensitivity (Preliminary)	-137 dBm
Data Rate	512 bits/s
Telegram Size	Flexible, 10 – 192 bytes (user data)
Interference Immunity	No system degradation at high in-band interference (i.e., up to 40% channel load)
Mobile Support	Supports data transmission from moving objects with speeds up to 120 km/h
Network Capacity	10 million of messages/day based on 10-byte message.
Security	AES-128 network encryption
Communication Standard	ETSI TS 103357

### MYTHINGS Base Station Parameters

Physical Characteristics	
Waveform	TS-UNB ETSI TS 103 357
Gateway	Advantech ARK-2250L
Receiver	SDR Play RSP1A, Procom Filter North America/Europe
Network Management	MYTHINGS Central with web-based interface and RESTful API
Interfaces	RESTful API, MQTT, Websocket, gRPC. Azure IoT Hub connection
3 <sup>rd</sup> Party Plugin System	Amazon Web Services (AWS) Connector, Software AG Cumulocity, RSSI Localization Service, Ericsson IoT Accelerator, Losant IoT Connector, Network Monitor
MYTHINGS OS	Ubuntu 20.04 LTS (64-bit)