

LoRa USB-Dongle 32001588xEU

Datasheet



Overview

The 32001588xEU is a family of USB dongles developed to test the functionality and radio parameters of the wireless protocol modules MiP 32001505xEU family. The latter mounts transceivers operating in the 868 MHz SRD Band optimized for very long range, low power applications, suitable for LPWA networks. Based on LoRa® RF Technology and LoRaWAN™ protocol, it provides ultra-long range spread spectrum communication and high interference immunity. Using the (G)FSK modem, it allows to easily add wM-Bus connectivity for utility meters.

The available radio stacks support a wide range of applications as the wM-Bus standard (32001588AEU mounting 32001505AEU), or accelerating the development of a LoRaWAN application (32001588BEU mounting 32001505BEU) using the LoRa modulation, or performing a local star network using the LoRa Mipot stack (32001588CEU mounting 32001505CEU). Using the LoRa Modem stack (32001588DEU mounting 32001505DEU), it is easy to create point-to-point applications or build a more complex custom stack. The 32001588FEU can be configured to work either as a LoRaWAN module (as 32001588BEU) or with the LoRa Modem stack (as 32001588DEU). The configuration can be changed runtime.

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1. Product Features

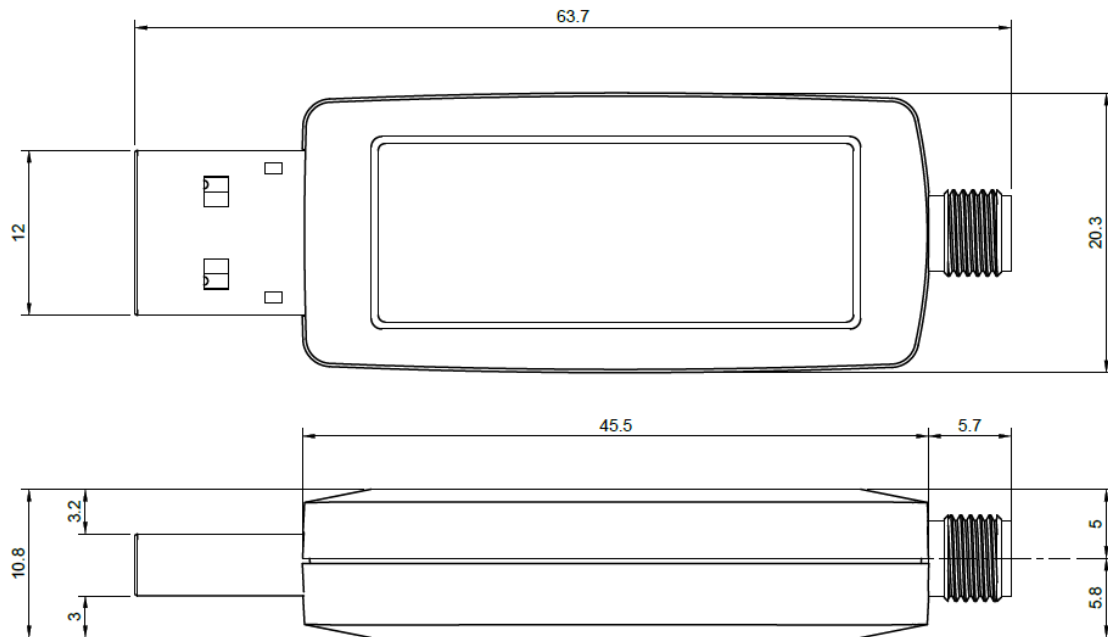
RF performances:

- ✓ -135 dBm Sensitivity @LoRa®
- ✓ +14 dBm Output Power

Multiple Stacks available:

- ✓ wM-Bus (32001588AEU)
- ✓ LoRaWAN™ specifications 1.0.4 (32001588BEU)
- ✓ LoRa Mipot (32001588CEU)
- ✓ LoRa Modem (32001588DEU)
- ✓ LoRa Multistack (32001588FEU)

2. Mechanical Dimensions



Note: Dimension in mm. General tolerance $\pm 0.1\text{mm}$. The tolerance is not cumulative

3. Electrical Characteristics

3.1.1. GENERAL ELECTRICAL CHARACTERISTICS

Parameter	Min.	Typ.	Max.	Unit	Notes
Supply Voltage (USB)	4	5.0	5.25	V	
RF Output Power	0	-	14	dBm	

4. Application Notes

Title	Description	Doc
Command Reference Manual	Description of commands for the wM-Bus stack	3200150xAxx_Com_Ref
Command Reference Manual	Description of commands for the LoRaWAN stack	3200150xBxx_Com_Ref
Command Reference Manual	Description of commands for the LoRa Mipot stack	3200150xCxx_Com_Ref
Command Reference Manual	Description of commands for the LoRa Modem stack	3200150xDxx_Com_Ref
Command Reference Manual	Description of commands for the multi-stack module	3200150xFxx_Com_Ref
Communication Interface	Description of how to use the USB - dongle	32001588xxx_Comm_Interface
User guide	Guide on how to use the LoRaWAN GUI	UG_TTN001 (BEU)
User guide	Guide on how to use the LoRaMipot GUI	UG_MIP001 (CEU)
User guide	Guide on how to use the LoRaModem GUI	UG_MOD001 (DEU)
User guide	Guide on how to use the LoRaModemWAN GUI	UG_DSM001 (FEU)

5. Revision History

Revision	Date	Description
0.0	25.11.2024	Draft