

<b>LoRaWAN® Communication Scenarios for ZENNER IUW &amp; IUWS meter series</b>				
<b>Communication Scenario no.</b>	<b>201</b>	<b>202</b>	<b>203</b>	<b>204</b>
Radio Frequency Band (MHz)	EU-868	EU-868	EU-868	EU-868
Sending interval	monthly	daily	3 hours	hourly
Radio Active Time	always	always	always	always
<b>Telegram data</b>				
daily value (24:00)		x		
key date	x	x		
key value	x	x		
recent month	x			
hourly values			x	x
status change (alarms)	x	x	x	x
calculated battery lifetime IUWS D Cell [years]	> 15	> 15	> 15	> 15
calculated battery lifetime NDC LoRa [years]	10 + reserve	10 + reserve	10	4 + reserve

*Please note:*

*For IUWS ultrasonic water meters with firmware 1.8.5 variants for the parallel use of both radio technologies (wireless M-Bus and LoRaWAN®) are available.*

wM-Bus Communication Scenarios for ZENNER IUW & IUWS meter series													
Communication Scenario	312	313	314	315	317	318	319	320	321	322	324	329	342
OMS certified							x				x	x	
Sending Interval	120 s	20 s	20 s	hourly	15 minutes	300 s	432 s	20s	20 s	16s	20s	20 s	20 s
RadioActiveTime	always	always	always	always	always	22:00 - 2:00	always	always	always	always	always	always	always
Commissioning scenario <i>(transmitting installation request packets, interval 30s, over one hour)</i>	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>Telegram data</b>													
current date	x	x	x	x	x				x		x	x	x
current date and time			x	x	x			x	x		x	x	x
current value			x	x	x	x	x	x	x	x	x	x	x
daily value (00:00)	x	x		x	x								
key value	x	x							x	x	x	x	x
recent month date	x							x				x	x
recent month	x	x		x	x			x	x	x	x	x	x
month -2 to -12	x							x				x	x
current water- & ambient temp.													x
two byte status	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>Times and frame, meter type and lifetime</b>													
NFC cycle time*	3600 s	3600 s	---	---	---	---	---	---	---	---	---	---	---
Mode of operation	C1	C1	C1	C1	C1	C1	C1	C1	C1	C1	C1	C1	C1
SecurityMode; Encryption mode	5	5	7	5	5	7	7	5	5	5	7	5	5
Scenario suitable for meter type IUW+NDC	x	x	not recommended	not recommended	not recommended	optional	optional	not recommended	not recommended	not recommended	not recommended	not recommended	not recommended
Scenario suitable for meter type IUWS	optional	optional	optional, for connection to SMGW**	optional	optional	optional, for connection to SMGW**	optional, for connection to SMGW**	optional	optional	optional	optional	optional	Standard ex works for IUWS D Cell version***
Calculated battery lifetime IUW (years)	> 15	> 15	---	---	---	---	---	---	---	---	---	---	---
Calculated battery lifetime NDC (years)	12+reserve	10	---	---	---	12+reserve	5	---	---	---	---	---	---
Calculated battery lifetime IUWS D-Cell version (years)	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve	15+reserve (202+342); 12+reserve (203/204+342)

\* NDC module is hourly requesting status data from the meter

\*\* SMGW = Smart meter gateway, used in German market

\*\*\* valid from Q4-2024

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