Telegram description

Telegram 1 : Default telegram

Description	Unit	Value if not available
Total Positive Active Energy (no resetable) : Ea+	kWh	0x7FFFFFFF
Total Positive Reactive Energy (no resetable) : Er +	kvarh	0x7FFFFFFF
Total Negative Active Energy (no resetable) : Ea-	kWh	0x7FFFFFFF
Total Negative Reactive Energy (no resetable) : Er -	kvarh	0x7FFFFFFF
Tariff number in progress (1 to 4)		0
4 * Positive Active Energies	kWh	0x7FFFFFFF
4 * Positive Reactive Enegies	kvarh	0x7FFFFFFF
∑ Active Power +/- : P	kW/100 (Signed)	0x7FFFFFFF
Active Power phase 1 +/- : P1	kW/100 (Signed)	0x7FFFFFFF
Active Power phase 2 +/- : P2	kW/100 (Signed)	0x7FFFFFFF
Active Power phase 3 +/- : P3	kW/100 (Signed)	0x7FFFFFFF
Current Transformer primary	A	0x7FFF
Phase to Phase Voltage: U12	V/100	0x7FFFFFFF
Phase to Phase Voltage: U23	V/100	0x7FFFFFFF
Phase to Phase Voltage: U31	V/100	0x7FFFFFFF
Simple voltage : V1	V/100	0x7FFFFFFF
Simple voltage : V2	V/100	0x7FFFFFFF
Simple voltage : V3	V/100	0x7FFFFFFF
Current : I1	mA	0x7FFFFFFF
Current : I2	mA	0x7FFFFFFF
Current : I3	mA	0x7FFFFFFF
Neutral Current : In	mA	0x7FFFFFFF

Telegram 2 : Energies

Description	Unit	Value if not available
Total Positive Active Energy (no resetable) : Ea+	kWh	0x7FFFFFFF
Total Positive Reactive Energy (no resetable) : Er +	kvarh	0x7FFFFFFF
Total Negative Active Energy (no resetable) : Ea-	kWh	0x7FFFFFFF
Total Negative Reactive Energy (no resetable) : Er -	kvarh	0x7FFFFFFF
Partial Positive Active Energy: Ea+	kWh	0x7FFFFFFF
Partial Positive Reactive Energy: Er +	kvarh	0x7FFFFFFF
Partial Negative Active Energy : Ea-	kWh	0x7FFFFFFF
Partial Negative Reactive Energy: Er -	kvarh	0x7FFFFFFF
Tariff number in progress (1 to 4)		0
4 * Positive Active Energies	kWh	0x7FFFFFFF
4 * Positive Reactive Enegies	kvarh	0x7FFFFFFF

Telegram 3 : Metrology

Description	Unit	Value if not available
Phase to Phase Voltage: U12	V/100	0x7FFFFFFF
Phase to Phase Voltage: U23	V/100	0x7FFFFFFF

Phase to Phase Voltage: U31	V/100	0x7FFFFFFF
Simple voltage : V1	V/100	0x7FFFFFFF
Simple voltage : V2	V/100	0x7FFFFFFF
Simple voltage : V3	V/100	0x7FFFFFFF
Current : I1	mA	0x7FFFFFFF
Current : I2	mA	0x7FFFFFFF
Current : I3	mA	0x7FFFFFFF
Neutral Current : In	mA	0x7FFFFFFF

Telegram 4 : Powers

Description	Unit	Value if not available
∑ Active Power +/- : P	kW/100 (Signed)	0x7FFFFFFF
∑ Reactive Power +/- : Q	kvar/100 (Signed)	0x7FFFFFFF
∑ Apparent Power : S	kVA/100	0x7FFFFFFF
∑ Power Factor : -: leading et + : lagging : PF	0,001 (Signed)	0x7FFFFFFF
Active Power phase 1 +/- : P1	kW/100 (Signed)	0x7FFFFFFF
Active Power phase 2 +/- : P2	kW/100 (Signed)	0x7FFFFFFF
Active Power phase 3 +/- : P3	kW/100 (Signed)	0x7FFFFFFF
Reactive Power phase 1 +/- : Q1	kvar/100 (Signed)	0x7FFFFFFF
Reactive Power phase 2 +/- : Q2	kvar/100 (Signed)	0x7FFFFFFF
Reactive Power phase 3 +/- : Q3	kvar/100 (Signed)	0x7FFFFFFF
Apparent Power phase 1 : S1	kVA/100	0x7FFFFFFF
Apparent Power phase 2 : S2	kVA/100	0x7FFFFFFF
Apparent Power phase 3 : S3	kVA/100	0x7FFFFFFF
Power Factor phase 1 -: leading and + : lagging : PF1	0,001 (Signed)	0x7FFFFFFF
Power Factor phase 2 -: leading and + : lagging : PF2	0,001 (Signed)	0x7FFFFFFF
Power Factor phase 3 -: leading and + : lagging : PF3	0,001 (Signed)	0x7FFFFFFF

Telegram 6 : Advanced information

Description	Unit	Value if not available
Product order ID (Countis:100, Protection:200, Atys:300, Diris:400)		0x7FFF
Product ID (EX: 1000 ATS3)		0x7FFF
Product software version (EX: 100 Version 1.00)		0x7FFF
Serial_AA_SS	Poids fort : AA poids faible : SS	0x7FFF
Serial_SST_L	Poids fort : SST poids faible : L	0x7FFF
Serial_order		0x7FFF
Serial_Reserve		0x7FFFFFFF
Network Type : 2 : 3BL (332), 3 : 3NBL (333), 5 : 4NBL (343)	–	0x7FFF
Current Transformer secondary : 1: 1 A 5: 5 A	A	0x7FFF
Current Transformer primary	A	0x7FFF
Synchronisation Top for P+/- Q+/- : time in seconds (1mn, 5mn, 8mn, 10mn, 15mn, 20mn, 30mn, 60mn)	secondes	0x7FFF
Day		0x7FFF
Month		0x7FFF
Year		0x7FFF
Hour		0x7FFF
Minute		0x7FFF
Second		0x7FFF
Tariff number in progress (1 to 8)		0

Telegram 9 : Indus Mode

Description	Unit	Value if not available
Indus Mode		0x7FFF

Commands description

Commands to send from Master to Slave to configure a slave

The commands are sent using SND_UD

Command	Description	CI Field	DIB	VIB	
Set Date/Time	Set Date and Time of the meter	0x51	0x06	0x6D	6 bytes
Select Telegram	Set the telegram to send in answer to an REQ_UD2 command. See "Telegram description" to know the content of each telegram. Valid values are 1xh with x=Telegram number (1 to 8)	0x50	No DIF	No VIF	1 byte
Com. Board Processor RESET	Software Reset of the communication board (like power off - power on)	0x50	No DIF	No VIF	1 byte=0x90
Set baud rate to 300bps	Change the communication baud rate. A valid message must be sent in the 2 minutes after this command in order to confirm the new baud rate. If the countis is in Auto Baud mode, it will switch in manual mode.	0xB8	No DIF	No VIF	No Data
Set baud rate to 600bps		0xB9	No DIF	No VIF	No Data
Set baud rate to 1200bps		0xBA	No DIF	No VIF	No Data
Set baud rate to 2400bps		0xBB	No DIF	No VIF	No Data
Set baud rate to 4800bps		0xBC	No DIF	No VIF	No Data
Set baud rate to 9600bps		0xBD	No DIF	No VIF	No Data
Reserved	Reserved	0xBE	No DIF	No VIF	No Data
Reserved	Reserved	0xBF	No DIF	No VIF	No Data
Set primary address (0-250)	Set the primary address of the countis. Valid values are in the range 0-250. Address 0 is reserved for first installation and is the default value after manufacturing.	0x51	0x01	0x7A	1 byte
Set secondary address (Manufacturer ID)	Set the Manufacturer Id for secondary addressing of the countis. Valid values are in the range 00000000-99999999. This Id is unique for the manufacturer and should not be changed.	0x51	0x0C	0x79	8 BCD(4 bytes)
Set secondary address (Full address)	Set the Manufacturer Id, Manufacturer code, Generation and Medium codes for secondary addressing of the countis. These codes form a unique address and should not be changed.	0x51	0x07	0x79	64 bits(2)
Set current tariff (1-4)	Set the current tariff	0x51	0x02	0x7C 0x03	1 Word
Reserved	Reserved	0x51	0x14	0xAC 0x07	No data
Reset Partial energies	Reinitialize partial energies	0x51	0xC4 0x01	0x86 0x07	No data
Set Network	Set the network configuration	0x51	0x02	0xFD 0x67	1 Word
Set Secondary CT	Set the Secondary curent transformer ratio	0x51	0x42	0xFD 0x67	1 Word
Set Primary CT	Set the Primary curent transformer ratio	0x51	0x82 0x01	0xFD 0x67	1 Word
Reserved	Reserved	0x51	0xC2 0x01	0xFD 0x67	1 Word

(2) Full Address				
Manufacturer ID	Manufacturer Code	Generation	Medium	

	(not changeable)		(not changeable)	
8 BCD (4 bytes)	E3h 4Dh	1 byte	1 byte=03h	
Data are coded LSB first. Example: Man. ID=12345678, Man. Code=4Dh E3h, Generation=4; Medium=3 78h, 56h, 34h, 12h,E3h, 4Dh,04h,03h				