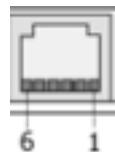# Rozhraní je funkční pouze na elektroměrech

ZPA - AM175
Meter & Control – ST402D
Sagemcom – XT211

Zapojení rozhraní

Konektor RJ-12
PIN č. 1 = Nezapojeno
PIN č. 2 = Nezapojeno
PIN č. 3 = Data A
PIN č. 4 = Data B
PIN č. 5 = Nezapojeno
PIN č. 6 = Shield (GND)

Konektor je umístěn tak, aby byl přístupný zákazníkovi.

Parametry rozhraní

Dvouvodičová sběrnice RS485 s protokolem DLMS/COSEM.
Přenosová rychlost je pevně nastavená na 9600Bd
Jednosměrná komunikace z elektroměru k zákazníkovi
Četnost předávání dat je 1x za 60 sec

Popis objektů na rozhraní:

Push setup - On Schedule 2 (HAN)

Idx	Name	OBIS
1	COSEM logical device name	{1, 0-0:42.0.0.255, 2}
2	Push setup – on schedule 2	{40, 0-2:25.9.0.255, 1}
3	Serial number	{1, 0-0:96.1.0.255, 2}
4	Disconnect status	{70, 0-0:96.3.10.255, 3}
5	Power limiter value	{71, 0-0:17.0.0.255, 3}
6	Relay 1 status	{70, 0-1:96.3.10.255, 3}
7	Relay 2 status	{70, 0-2:96.3.10.255, 3}
8	Relay 3 status	{70, 0-3:96.3.10.255, 3}
9	Relay 4 status	{70, 0-4:96.3.10.255, 3}
10	Relay 5 status	{70, 0-5:96.3.10.255, 3}
11	Relay 6 status	{70, 0-6:96.3.10.255, 3}
12	Currently Active Energy Tariff	{1, 0-0:96.14.0.255, 2}
13	Instantaneous active power import (+A)	{3, 1-0:1.7.0.255, 2}
14	Instantaneous active power import (+A) L1	{3, 1-0:21.7.0.255, 2}
15	Instantaneous active power import (+A) L2	{3, 1-0:41.7.0.255, 2}
16	Instantaneous active power import (+A) L3	{3, 1-0:61.7.0.255, 2}
17	Instantaneous active power export (-A)	{3, 1-0:2.7.0.255, 2}
18	Instantaneous active power export (-A) L1	{3, 1-0:22.7.0.255, 2}
19	Instantaneous active power export (-A) L2	{3, 1-0:42.7.0.255, 2}
20	Instantaneous active power export (-A) L3	{3, 1-0:62.7.0.255, 2}
21	Cumulative active import energy (+A)	{3, 1-0:1.8.0.255, 2}
22	Cumulative active import energy (+A) rate 1	{3, 1-0:1.8.1.255, 2}
23	Cumulative active import energy (+A) rate 2	{3, 1-0:1.8.2.255, 2}
24	Cumulative active import energy (+A) rate 3	{3, 1-0:1.8.3.255, 2}
25	Cumulative active import energy (+A) rate 4	{3, 1-0:1.8.4.255, 2}
26	Cumulative active export energy (-A)	{3, 1-0:2.8.0.255, 2}
27	Consumer message text	{1, 0-0:96.13.0.255, 2}

Příklad posílané zprávy

```
Data sample

0F 00 00 00 01 00 02 02 16 01 01 16 02 02 00 01 00 00 2A 00 00 FF 02 09 10 45 47 44 30 31 32 33 34 35 02 02 00 28 00 02 19 09 00 FF 01
09 06 00 02 19 09 00 FF 02 02 00 01 00 00 60 01 00 FF 02 09 0A 30 31 32 33 34 35 36 37 38 39 02 02 00 46 00 00 60 03 0A FF 03 16 01 02
02 00 47 00 00 11 00 00 FF 03 06 00 00 00 00 02 02 00 46 00 01 60 03 0A FF 03 16 01 02 02 00 46 00 02 60 03 0A FF 03 16 01 02 02 00 46
00 03 60 03 0A FF 03 16 00 02 02 00 46 00 04 60 03 0A FF 03 16 00 02 02 00 46 00 05 60 03 0A FF 03 16 00 02 02 00 46 00 06 60 03 0A FF
03 16 00 02 02 00 01 00 00 60 0E 00 FF 02 09 02 54 33 02 02 00 03 01 00 01 07 00 FF 02 06 00 00 00 03 02 02 00 03 01 00 15 07 00 FF 02
06 00 00 00 01 02 02 00 03 01 00 29 07 00 FF 02 06 00 00 00 01 02 02 00 03 01 00 3D 07 00 FF 02 06 00 00 00 01 02 02 00 03 01 00 02 07
00 FF 02 06 00 00 00 03 02 02 00 03 01 00 16 07 00 FF 02 06 00 00 00 01 02 02 00 03 01 00 2A 07 00 FF 02 06 00 00 00 01 02 02 00 03 01
00 3E 07 00 FF 02 06 00 00 00 01 02 02 00 03 01 00 01 08 00 FF 02 06 00 00 00 08 02 02 00 03 01 00 01 08 01 FF 02 06 00 00 00 00 02 02
00 03 01 00 01 08 02 FF 02 06 00 00 00 04 02 02 00 03 01 00 01 08 03 FF 02 06 00 00 00 04 02 02 00 03 01 00 01 08 04 FF 02 06 00 00 00
00 02 02 00 03 01 00 02 08 00 FF 02 06 00 00 00 04 02 02 00 01 00 00 60 0D 00 FF 02 09 00
```

Data sample		
HEX items	Parsed items	Unit
0F	data-notification	
00 00 00 01	long-invoke-id-and-priority = 0x00000001	
00	date-time = null	
02 02 16 01 01 16	structure(2) = {enum = 1, array = 22}	
02 02 00 01 00 00 2A 00 00 FF 02 09 10 45 47 44 30 31 32 33 34 35	structure(2) = {(0,1,0,0,42,0,0,255,2), octet-string(16) = "EGD012345"}	
02 02 00 28 00 02 19 09 00 FF 01 09 06 00 02 19 09 00 FF	structure(2) = {(0,40,0,2,25,9,0,255,1), octet-string(6) = (0,2,25,9,0,255)}	
02 02 00 01 00 00 60 01 00 FF 02 09 0A 30 31 32 33 34 35 36 37 38 39	structure(2) = {(0,1,0,0,96,1,0,255,2), octet-string(10) = "0123456789"}	
02 02 00 46 00 00 60 03 0A FF 03 16 01	structure(2) = {(0,70,0,0,96,3,10,255,3), enum = 1}	[connected]
02 02 00 47 00 00 11 00 00 FF 03 06 00 00 00 00	structure(2) = {(0,71,0,0,17,0,0,255,3), double-long-unsigned = 0}	[W]
02 02 00 46 00 01 60 03 0A FF 03 16 01	structure(2) = {(0,70,0,1,96,3,10,255,3), enum = 1}	[connected]
02 02 00 46 00 02 60 03 0A FF 03 16 01	structure(2) = {(0,70,0,2,96,3,10,255,3), enum = 1}	[connected]
02 02 00 46 00 03 60 03 0A FF 03 16 00	structure(2) = {(0,70,0,3,96,3,10,255,3), enum = 0}	[disconnected]
02 02 00 46 00 04 60 03 0A FF 03 16 00	structure(2) = {(0,70,0,4,96,3,10,255,3), enum = 0}	[disconnected]
02 02 00 46 00 05 60 03 0A FF 03 16 00	structure(2) = {(0,70,0,5,96,3,10,255,3), enum = 0}	[disconnected]
02 02 00 46 00 06 60 03 0A FF 03 16 00	structure(2) = {(0,70,0,6,96,3,10,255,3), enum = 0}	[disconnected]
02 02 00 01 00 00 60 0E 00 FF 02 09 02 54 33	structure(2) = {(0,1,0,0,96,14,0,255,2), octet-string = "T3"}	
02 02 00 03 01 00 01 07 00 FF 02 06 00 00 00 03	structure(2) = {(0,3,1,0,1,7,0,255,2), double-long-unsigned = 3}	[W]
02 02 00 03 01 00 15 07 00 FF 02 06 00 00 00 01	structure(2) = {(0,3,1,0,21,7,0,255,2), double-long-unsigned = 1}	[W]
02 02 00 03 01 00 29 07 00 FF 02 06 00 00 00 01	structure(2) = {(0,3,1,0,41,7,0,255,2), double-long-unsigned = 1}	[W]
02 02 00 03 01 00 3D 07 00 FF 02 06 00 00 00 01	structure(2) = {(0,3,1,0,61,7,0,255,2), double-long-unsigned = 1}	[W]
02 02 00 03 01 00 02 07 00 FF 02 06 00 00 00 03	structure(2) = {(0,3,1,0,2,7,0,255,2), double-long-unsigned = 3}	[W]
02 02 00 03 01 00 16 07 00 FF 02 06 00 00 00 01	structure(2) = {(0,3,1,0,22,7,0,255,2), double-long-unsigned = 1}	[W]
02 02 00 03 01 00 2A 07 00 FF 02 06 00 00 00 01	structure(2) = {(0,3,1,0,42,7,0,255,2), double-long-unsigned = 1}	[W]
02 02 00 03 01 00 3E 07 00 FF 02 06 00 00 00 01	structure(2) = {(0,3,1,0,62,7,0,255,2), double-long-unsigned = 1}	[W]
02 02 00 03 01 00 01 08 00 FF 02 06 00 00 00 08	structure(2) = {(0,3,1,0,1,8,0,255,2), double-long-unsigned = 8}	[Wh]
02 02 00 03 01 00 01 08 01 FF 02 06 00 00 00 00	structure(2) = {(0,3,1,0,1,8,1,255,2), double-long-unsigned = 0}	[Wh]
02 02 00 03 01 00 01 08 02 FF 02 06 00 00 00 04	structure(2) = {(0,3,1,0,1,8,2,255,2), double-long-unsigned = 4}	[Wh]
02 02 00 03 01 00 01 08 03 FF 02 06 00 00 00 04	structure(2) = {(0,3,1,0,1,8,3,255,2), double-long-unsigned = 4}	[Wh]
02 02 00 03 01 00 01 08 04 FF 02 06 00 00 00 00	structure(2) = {(0,3,1,0,1,8,4,255,2), double-long-unsigned = 0}	[Wh]
02 02 00 03 01 00 02 08 00 FF 02 06 00 00 00 04	structure(2) = {(0,3,1,0,2,8,0,255,2), double-long-unsigned = 4}	[Wh]
02 02 00 01 00 00 60 0D 00 FF 02 09 00	structure(2) = {(0,1,0,0,96,13,0,255,2), octet-string = null}	