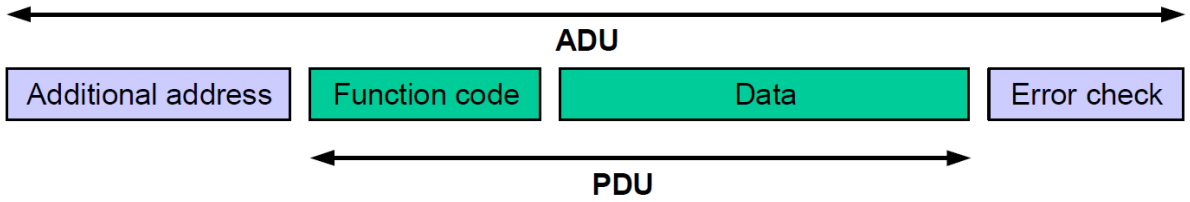
Mapa MODBUS registrů

Zařízení:	**ATS-C120, ATS-mini**	(stejný firmware)
Verze:	**3.25.3.12**	(verze firmware)
Datum:	**15.03.2025**	(verze dokumentu)

Úvodní informace

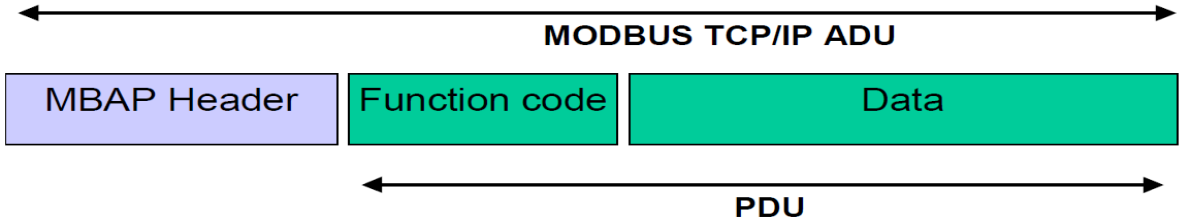
MODBUS RTU

Upozornění: **Pozor! Přestože ATS-C120 je vybaveno rozhraním RS485, není MODBUS RTU implementován!**



MODBUS TCP

Pro rozhraní **ETHERNET** je použit protokol dle standardu MODBUS TCP (port 502):



Adresace: **Adresa zařízení (slave id) uvedená v hlavičce MBAP se ignoruje**

Počet připojení: **Modbus port má vyhrazeny pouze dva sockety, tzn. lze vytvořit max. 2 souběžné připojení**

Pozor, modbus je třeba povolit přes program EDS, záložka TELNET, menu 1, nastavit port MODBUS = 502 nebo přes web manager (musíte mít aktuální verze firmware, CGI a web manageru ATS-C120 ze dne 12.3.2025 nebo novější)

Aktualizace firmware, CGI, Web

Vždy používejte aktuální verzi firmware: program MaxComm 10 (Domů / Připojené / FW)
A také tzv. CGI a web manager: program EDS (Menu... / Aktualizovat zařízení)

Datové typy, implementace

Obecně: Běžné 16-bitové registry jsou uloženy dle specifikace MODBUS, tzn. **BIG ENDIAN** (MSB first). Větší registry (např UINT32) a struktury jsou uloženy jako **LITLE ENDIAN** (LSB first)!

string posloupnost jednobytových znaků je uložena přirozeně sekvenčně, příklad pro text: **"ABCDE"**. String zakončen nulou ´\0´.
[Adresa] **0x4142**
[Adresa+1] **0x4344**
[Adresa+2] **0x4500**

uint16 rozsah: **0 až 65536**, dle specifikace MODBUS (MSB), příklad pro číslo: **0x1234** (4660)
[Adresa] **0x1234**

int16 rozsah: **-32768 až 32767**, dle specifikace MODBUS (MSB), příklad pro číslo: **0xEDCC** (-4660)
[Adresa] **0xEDCC**

uint32 rozsah: **0 až 4294967295**, uloženo jako **2x uint16**: LSB, MSB, příklad pro číslo: **0x12345678** (305419896)
[Adresa] **0x5678**
[Adresa+1] **0x1234**

int32 rozsah: -**2147483648 až 2147483647**, uloženo jako **2x uint16**: LSB, MSB, příklad pro číslo: **0x12345678** (305419896)

[Adresa] **0x5678**
[Adresa+1] **0x1234**

float **IEEE-754**, uloženo jako **uint32**: LSB, MSB, příklad pro číslo: **2.28444433212** (0x40123456)
[Adresa] **0x3456**
[Adresa+1] **0x4012** viz: https://www.h-schmidt.net/FloatConverter/IEEE754.html

verze číslo verze je uloženo jako **UINT32**, např. verze **3.23.9.12** je kódována jako číslo **3230912**
- první číslo je hlavní verze (3), pak vždy dvě cifry: rok (23), měsíc (09) a den (12)
[Adresa] **0x4CC0** LSB
[Adresa+1] **0x0031** MSB

Adresace pro Simatic (program WinCC)

Adresování MODBUS registrů v systému Simatic je specifické - použijte **prefix 4x40… plus 1**
Příklad: Adresa Simatic adresa
1536 **4x401537**

CPU type: Concept, ProWORX, Compact, Quantum, Momentum
Communication driver: Modicon modbus TCP/IP

Systémové informace

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x0	0	10	Vendor	R	3, 4	string		"PK-ELSYS"
0x5	5	22	Product (text)	R	3, 4	string		"ATS-C120-LM"
0x10	16	4	Version FirmWare	R	3, 4	verze		V.YY.MM.DD
0x12	18	4	Version Proto (compatibility)	R	3, 4	verze		V.YY.MM.DD
0x14	20	2	Product (code)	R	3, 4	uint16		
0x15	21	4	Serial Number	R	3, 4	uint32		
0x17	23	2	Max. Msr. Count (licensed)	R	3, 4	uint16		6, 14, 120
0x18	24	2	Max. Outputs Count	R	3, 4	uint16		32

Parametry / konstanty měření pro přepočet impulzů na energii

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x100	256	4	PPU1	R	3, 4	float		default = 1.000
0x102	258	4	PPU2	R	3, 4	float		
0x104	260	4	PPU3	R	3, 4	float		
0x106	262	4	PPU4	R	3, 4	float		
0x108	264	4	PPU5	R	3, 4	float		
0x10A	266	4	PPU6	R	3, 4	float		
0x10C	268	4	PPU7	R	3, 4	float		
0x10E	270	4	PPU8	R	3, 4	float		
0x110	272	4	PPU9	R	3, 4	float		
0x112	274	4	PPU10	R	3, 4	float		
0x114	276	4	PPU11	R	3, 4	float		
0x116	278	4	PPU12	R	3, 4	float		
0x118	280	4	PPU13	R	3, 4	float		
0x11A	282	4	PPU14	R	3, 4	float		
0x11C	284	4	PPU15	R	3, 4	float		
0x11E	286	4	PPU16	R	3, 4	float		
0x120	288	4	PPU17	R	3, 4	float		
0x122	290	4	PPU18	R	3, 4	float		
0x124	292	4	PPU19	R	3, 4	float		
0x126	294	4	PPU20	R	3, 4	float		
0x128	296	4	PPU21	R	3, 4	float		
0x12A	298	4	PPU22	R	3, 4	float		
0x12C	300	4	PPU23	R	3, 4	float		
0x12E	302	4	PPU24	R	3, 4	float		
0x130	304	4	PPU25	R	3, 4	float		
0x132	306	4	PPU26	R	3, 4	float		
0x134	308	4	PPU27	R	3, 4	float		
0x136	310	4	PPU28	R	3, 4	float		
0x138	312	4	PPU29	R	3, 4	float		
0x13A	314	4	PPU30	R	3, 4	float		
0x13C	316	4	PPU31	R	3, 4	float		
0x13E	318	4	PPU32	R	3, 4	float		
0x140	320	4	PPU33	R	3, 4	float		
0x142	322	4	PPU34	R	3, 4	float		
0x144	324	4	PPU35	R	3, 4	float		

0x146	326	4	PPU36	R	3, 4	float
0x148	328	4	PPU37	R	3, 4	float
0x14A	330	4	PPU38	R	3, 4	float
0x14C	332	4	PPU39	R	3, 4	float
0x14E	334	4	PPU40	R	3, 4	float
0x150	336	4	PPU41	R	3, 4	float
0x152	338	4	PPU42	R	3, 4	float
0x154	340	4	PPU43	R	3, 4	float
0x156	342	4	PPU44	R	3, 4	float
0x158	344	4	PPU45	R	3, 4	float
0x15A	346	4	PPU46	R	3, 4	float
0x15C	348	4	PPU47	R	3, 4	float
0x15E	350	4	PPU48	R	3, 4	float
0x160	352	4	PPU49	R	3, 4	float
0x162	354	4	PPU50	R	3, 4	float
0x164	356	4	PPU51	R	3, 4	float
0x166	358	4	PPU52	R	3, 4	float
0x168	360	4	PPU53	R	3, 4	float
0x16A	362	4	PPU54	R	3, 4	float
0x16C	364	4	PPU55	R	3, 4	float
0x16E	366	4	PPU56	R	3, 4	float
0x170	368	4	PPU57	R	3, 4	float
0x172	370	4	PPU58	R	3, 4	float
0x174	372	4	PPU59	R	3, 4	float
0x176	374	4	PPU60	R	3, 4	float
0x178	376	4	PPU61	R	3, 4	float
0x17A	378	4	PPU62	R	3, 4	float
0x17C	380	4	PPU63	R	3, 4	float
0x17E	382	4	PPU64	R	3, 4	float
0x180	384	4	PPU65	R	3, 4	float
0x182	386	4	PPU66	R	3, 4	float
0x184	388	4	PPU67	R	3, 4	float
0x186	390	4	PPU68	R	3, 4	float
0x188	392	4	PPU69	R	3, 4	float
0x18A	394	4	PPU70	R	3, 4	float
0x18C	396	4	PPU71	R	3, 4	float
0x18E	398	4	PPU72	R	3, 4	float
0x190	400	4	PPU73	R	3, 4	float
0x192	402	4	PPU74	R	3, 4	float
0x194	404	4	PPU75	R	3, 4	float
0x196	406	4	PPU76	R	3, 4	float
0x198	408	4	PPU77	R	3, 4	float
0x19A	410	4	PPU78	R	3, 4	float
0x19C	412	4	PPU79	R	3, 4	float
0x19E	414	4	PPU80	R	3, 4	float
0x1A0	416	4	PPU81	R	3, 4	float
0x1A2	418	4	PPU82	R	3, 4	float
0x1A4	420	4	PPU83	R	3, 4	float
0x1A6	422	4	PPU84	R	3, 4	float
0x1A8	424	4	PPU85	R	3, 4	float
0x1AA	426	4	PPU86	R	3, 4	float
0x1AC	428	4	PPU87	R	3, 4	float
0x1AE	430	4	PPU88	R	3, 4	float
0x1B0	432	4	PPU89	R	3, 4	float
0x1B2	434	4	PPU90	R	3, 4	float
0x1B4	436	4	PPU91	R	3, 4	float
0x1B6	438	4	PPU92	R	3, 4	float
0x1B8	440	4	PPU93	R	3, 4	float
0x1BA	442	4	PPU94	R	3, 4	float
0x1BC	444	4	PPU95	R	3, 4	float
0x1BE	446	4	PPU96	R	3, 4	float
0x1C0	448	4	PPU97	R	3, 4	float
0x1C2	450	4	PPU98	R	3, 4	float
0x1C4	452	4	PPU99	R	3, 4	float
0x1C6	454	4	PPU100	R	3, 4	float
0x1C8	456	4	PPU101	R	3, 4	float
0x1CA	458	4	PPU102	R	3, 4	float
0x1CC	460	4	PPU103	R	3, 4	float
0x1CE	462	4	PPU104	R	3, 4	float
0x1D0	464	4	PPU105	R	3, 4	float
0x1D2	466	4	PPU106	R	3, 4	float
0x1D4	468	4	PPU107	R	3, 4	float
0x1D6	470	4	PPU108	R	3, 4	float
0x1D8	472	4	PPU109	R	3, 4	float

0x1DA	474	4	PPU110	R	3, 4	float		
0x1DC	476	4	PPU111	R	3, 4	float		
0x1DE	478	4	PPU112	R	3, 4	float		
0x1E0	480	4	PPU113	R	3, 4	float		
0x1E2	482	4	PPU114	R	3, 4	float		
0x1E4	484	4	PPU115	R	3, 4	float		
0x1E6	486	4	PPU116	R	3, 4	float		
0x1E8	488	4	PPU117	R	3, 4	float		
0x1EA	490	4	PPU118	R	3, 4	float		
0x1EC	492	4	PPU119	R	3, 4	float		
0x1EE	494	4	PPU120	R	3, 4	float		

Parametry / regulace

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x200	512	2	Synchronize interval	R	3, 4	uint16		0=15min, 1=1h, 2=24h
0x201	513	2	Sync24H/start	R	3, 4	uint16	h	start hour, 24h sync only
0x202	514	4	Reg. Max. T1	R	3, 4	uint32		
0x204	516	4	Reg. Max. T2	R	3, 4	uint32		
0x206	518	2	Reg. Step	R	3, 4	uint16	s	
0x207	519	2	Line ON	R	3, 4	uint16	%	0 - 99
0x208	520	2	Line OFF	R	3, 4	uint16	%	0 - 99
0x209	521	2	Idle begin	R	3, 4	uint16	%	0 - 99
0x20A	522	2	Idle end	R	3, 4	uint16	%	0 - 99
0x20B	523	2	Limit ON	R	3, 4	uint16	%	0 - 99
0x20C	524	2	Prediction from	R	3, 4	uint16	%	0 - 99
0x20D	525	2	Outputs inverted	R	3, 4	uint16		0=NORMAL, 1=INVERTED
0x20E	526	2	Power limit	R	3, 4	uint16		04.03.2025

Parametry / režim provozu výstupního relé

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x300	768	2	Output mode 1	R	3, 4	uint16		0=DISABLED, 1=NORMAL, 2-9=SIGNAL MODE
0x301	769	2	Output mode 2	R	3, 4	uint16		
0x302	770	2	Output mode 3	R	3, 4	uint16		
0x303	771	2	Output mode 4	R	3, 4	uint16		
0x304	772	2	Output mode 5	R	3, 4	uint16		
0x305	773	2	Output mode 6	R	3, 4	uint16		
0x306	774	2	Output mode 7	R	3, 4	uint16		
0x307	775	2	Output mode 8	R	3, 4	uint16		
0x308	776	2	Output mode 9	R	3, 4	uint16		
0x309	777	2	Output mode 10	R	3, 4	uint16		
0x30A	778	2	Output mode 11	R	3, 4	uint16		
0x30B	779	2	Output mode 12	R	3, 4	uint16		
0x30C	780	2	Output mode 13	R	3, 4	uint16		
0x30D	781	2	Output mode 14	R	3, 4	uint16		
0x30E	782	2	Output mode 15	R	3, 4	uint16		
0x30F	783	2	Output mode 16	R	3, 4	uint16		
0x310	784	2	Output mode 17	R	3, 4	uint16		
0x311	785	2	Output mode 18	R	3, 4	uint16		
0x312	786	2	Output mode 19	R	3, 4	uint16		
0x313	787	2	Output mode 20	R	3, 4	uint16		
0x314	788	2	Output mode 21	R	3, 4	uint16		
0x315	789	2	Output mode 22	R	3, 4	uint16		
0x316	790	2	Output mode 23	R	3, 4	uint16		
0x317	791	2	Output mode 24	R	3, 4	uint16		
0x318	792	2	Output mode 25	R	3, 4	uint16		
0x319	793	2	Output mode 26	R	3, 4	uint16		
0x31A	794	2	Output mode 27	R	3, 4	uint16		
0x31B	795	2	Output mode 28	R	3, 4	uint16		
0x31C	796	2	Output mode 29	R	3, 4	uint16		
0x31D	797	2	Output mode 30	R	3, 4	uint16		
0x31E	798	2	Output mode 31	R	3, 4	uint16		
0x31F	799	2	Output mode 32	R	3, 4	uint16		

Parametry / priority blokování výstupních relé

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x320	800	2	Output priority 1	R	3, 4	uint16		0 - 32

0x321	801	2	Output priority 2	R	3, 4	uint16	
0x322	802	2	Output priority 3	R	3, 4	uint16	
0x323	803	2	Output priority 4	R	3, 4	uint16	
0x324	804	2	Output priority 5	R	3, 4	uint16	
0x325	805	2	Output priority 6	R	3, 4	uint16	
0x326	806	2	Output priority 7	R	3, 4	uint16	
0x327	807	2	Output priority 8	R	3, 4	uint16	
0x328	808	2	Output priority 9	R	3, 4	uint16	
0x329	809	2	Output priority 10	R	3, 4	uint16	
0x32A	810	2	Output priority 11	R	3, 4	uint16	
0x32B	811	2	Output priority 12	R	3, 4	uint16	
0x32C	812	2	Output priority 13	R	3, 4	uint16	
0x32D	813	2	Output priority 14	R	3, 4	uint16	
0x32E	814	2	Output priority 15	R	3, 4	uint16	
0x32F	815	2	Output priority 16	R	3, 4	uint16	
0x330	816	2	Output priority 17	R	3, 4	uint16	
0x331	817	2	Output priority 18	R	3, 4	uint16	
0x332	818	2	Output priority 19	R	3, 4	uint16	
0x333	819	2	Output priority 20	R	3, 4	uint16	
0x334	820	2	Output priority 21	R	3, 4	uint16	
0x335	821	2	Output priority 22	R	3, 4	uint16	
0x336	822	2	Output priority 23	R	3, 4	uint16	
0x337	823	2	Output priority 24	R	3, 4	uint16	
0x338	824	2	Output priority 25	R	3, 4	uint16	
0x339	825	2	Output priority 26	R	3, 4	uint16	
0x33A	826	2	Output priority 27	R	3, 4	uint16	
0x33B	827	2	Output priority 28	R	3, 4	uint16	
0x33C	828	2	Output priority 29	R	3, 4	uint16	
0x33D	829	2	Output priority 30	R	3, 4	uint16	
0x33E	830	2	Output priority 31	R	3, 4	uint16	
0x33F	831	2	Output priority 32	R	3, 4	uint16	

Měření / 15 minutové registry (nulují se každých 15 minut)

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x400	1024	4	Energy (15 min) 1	R	3, 4	float		Energy = "Pulse Count" / "PPU"
0x402	1026	4	Energy (15 min) 2	R	3, 4	float		
0x404	1028	4	Energy (15 min) 3	R	3, 4	float		
0x406	1030	4	Energy (15 min) 4	R	3, 4	float		
0x408	1032	4	Energy (15 min) 5	R	3, 4	float		
0x40A	1034	4	Energy (15 min) 6	R	3, 4	float		
0x40C	1036	4	Energy (15 min) 7	R	3, 4	float		
0x40E	1038	4	Energy (15 min) 8	R	3, 4	float		
0x410	1040	4	Energy (15 min) 9	R	3, 4	float		
0x412	1042	4	Energy (15 min) 10	R	3, 4	float		
0x414	1044	4	Energy (15 min) 11	R	3, 4	float		
0x416	1046	4	Energy (15 min) 12	R	3, 4	float		
0x418	1048	4	Energy (15 min) 13	R	3, 4	float		
0x41A	1050	4	Energy (15 min) 14	R	3, 4	float		
0x41C	1052	4	Energy (15 min) 15	R	3, 4	float		
0x41E	1054	4	Energy (15 min) 16	R	3, 4	float		
0x420	1056	4	Energy (15 min) 17	R	3, 4	float		
0x422	1058	4	Energy (15 min) 18	R	3, 4	float		
0x424	1060	4	Energy (15 min) 19	R	3, 4	float		
0x426	1062	4	Energy (15 min) 20	R	3, 4	float		
0x428	1064	4	Energy (15 min) 21	R	3, 4	float		
0x42A	1066	4	Energy (15 min) 22	R	3, 4	float		
0x42C	1068	4	Energy (15 min) 23	R	3, 4	float		
0x42E	1070	4	Energy (15 min) 24	R	3, 4	float		
0x430	1072	4	Energy (15 min) 25	R	3, 4	float		
0x432	1074	4	Energy (15 min) 26	R	3, 4	float		
0x434	1076	4	Energy (15 min) 27	R	3, 4	float		
0x436	1078	4	Energy (15 min) 28	R	3, 4	float		
0x438	1080	4	Energy (15 min) 29	R	3, 4	float		
0x43A	1082	4	Energy (15 min) 30	R	3, 4	float		
0x43C	1084	4	Energy (15 min) 31	R	3, 4	float		
0x43E	1086	4	Energy (15 min) 32	R	3, 4	float		
0x440	1088	4	Energy (15 min) 33	R	3, 4	float		
0x442	1090	4	Energy (15 min) 34	R	3, 4	float		
0x444	1092	4	Energy (15 min) 35	R	3, 4	float		
0x446	1094	4	Energy (15 min) 36	R	3, 4	float		
0x448	1096	4	Energy (15 min) 37	R	3, 4	float		

0x44A	1098	4	Energy (15 min) 38	R	3, 4	float
0x44C	1100	4	Energy (15 min) 39	R	3, 4	float
0x44E	1102	4	Energy (15 min) 40	R	3, 4	float
0x450	1104	4	Energy (15 min) 41	R	3, 4	float
0x452	1106	4	Energy (15 min) 42	R	3, 4	float
0x454	1108	4	Energy (15 min) 43	R	3, 4	float
0x456	1110	4	Energy (15 min) 44	R	3, 4	float
0x458	1112	4	Energy (15 min) 45	R	3, 4	float
0x45A	1114	4	Energy (15 min) 46	R	3, 4	float
0x45C	1116	4	Energy (15 min) 47	R	3, 4	float
0x45E	1118	4	Energy (15 min) 48	R	3, 4	float
0x460	1120	4	Energy (15 min) 49	R	3, 4	float
0x462	1122	4	Energy (15 min) 50	R	3, 4	float
0x464	1124	4	Energy (15 min) 51	R	3, 4	float
0x466	1126	4	Energy (15 min) 52	R	3, 4	float
0x468	1128	4	Energy (15 min) 53	R	3, 4	float
0x46A	1130	4	Energy (15 min) 54	R	3, 4	float
0x46C	1132	4	Energy (15 min) 55	R	3, 4	float
0x46E	1134	4	Energy (15 min) 56	R	3, 4	float
0x470	1136	4	Energy (15 min) 57	R	3, 4	float
0x472	1138	4	Energy (15 min) 58	R	3, 4	float
0x474	1140	4	Energy (15 min) 59	R	3, 4	float
0x476	1142	4	Energy (15 min) 60	R	3, 4	float
0x478	1144	4	Energy (15 min) 61	R	3, 4	float
0x47A	1146	4	Energy (15 min) 62	R	3, 4	float
0x47C	1148	4	Energy (15 min) 63	R	3, 4	float
0x47E	1150	4	Energy (15 min) 64	R	3, 4	float
0x480	1152	4	Energy (15 min) 65	R	3, 4	float
0x482	1154	4	Energy (15 min) 66	R	3, 4	float
0x484	1156	4	Energy (15 min) 67	R	3, 4	float
0x486	1158	4	Energy (15 min) 68	R	3, 4	float
0x488	1160	4	Energy (15 min) 69	R	3, 4	float
0x48A	1162	4	Energy (15 min) 70	R	3, 4	float
0x48C	1164	4	Energy (15 min) 71	R	3, 4	float
0x48E	1166	4	Energy (15 min) 72	R	3, 4	float
0x490	1168	4	Energy (15 min) 73	R	3, 4	float
0x492	1170	4	Energy (15 min) 74	R	3, 4	float
0x494	1172	4	Energy (15 min) 75	R	3, 4	float
0x496	1174	4	Energy (15 min) 76	R	3, 4	float
0x498	1176	4	Energy (15 min) 77	R	3, 4	float
0x49A	1178	4	Energy (15 min) 78	R	3, 4	float
0x49C	1180	4	Energy (15 min) 79	R	3, 4	float
0x49E	1182	4	Energy (15 min) 80	R	3, 4	float
0x4A0	1184	4	Energy (15 min) 81	R	3, 4	float
0x4A2	1186	4	Energy (15 min) 82	R	3, 4	float
0x4A4	1188	4	Energy (15 min) 83	R	3, 4	float
0x4A6	1190	4	Energy (15 min) 84	R	3, 4	float
0x4A8	1192	4	Energy (15 min) 85	R	3, 4	float
0x4AA	1194	4	Energy (15 min) 86	R	3, 4	float
0x4AC	1196	4	Energy (15 min) 87	R	3, 4	float
0x4AE	1198	4	Energy (15 min) 88	R	3, 4	float
0x4B0	1200	4	Energy (15 min) 89	R	3, 4	float
0x4B2	1202	4	Energy (15 min) 90	R	3, 4	float
0x4B4	1204	4	Energy (15 min) 91	R	3, 4	float
0x4B6	1206	4	Energy (15 min) 92	R	3, 4	float
0x4B8	1208	4	Energy (15 min) 93	R	3, 4	float
0x4BA	1210	4	Energy (15 min) 94	R	3, 4	float
0x4BC	1212	4	Energy (15 min) 95	R	3, 4	float
0x4BE	1214	4	Energy (15 min) 96	R	3, 4	float
0x4C0	1216	4	Energy (15 min) 97	R	3, 4	float
0x4C2	1218	4	Energy (15 min) 98	R	3, 4	float
0x4C4	1220	4	Energy (15 min) 99	R	3, 4	float
0x4C6	1222	4	Energy (15 min) 100	R	3, 4	float
0x4C8	1224	4	Energy (15 min) 101	R	3, 4	float
0x4CA	1226	4	Energy (15 min) 102	R	3, 4	float
0x4CC	1228	4	Energy (15 min) 103	R	3, 4	float
0x4CE	1230	4	Energy (15 min) 104	R	3, 4	float
0x4D0	1232	4	Energy (15 min) 105	R	3, 4	float
0x4D2	1234	4	Energy (15 min) 106	R	3, 4	float
0x4D4	1236	4	Energy (15 min) 107	R	3, 4	float
0x4D6	1238	4	Energy (15 min) 108	R	3, 4	float
0x4D8	1240	4	Energy (15 min) 109	R	3, 4	float
0x4DA	1242	4	Energy (15 min) 110	R	3, 4	float
0x4DC	1244	4	Energy (15 min) 111	R	3, 4	float

0x4DE	1246	4	Energy (15 min) 112	R	3, 4	float	
0x4E0	1248	4	Energy (15 min) 113	R	3, 4	float	
0x4E2	1250	4	Energy (15 min) 114	R	3, 4	float	
0x4E4	1252	4	Energy (15 min) 115	R	3, 4	float	
0x4E6	1254	4	Energy (15 min) 116	R	3, 4	float	
0x4E8	1256	4	Energy (15 min) 117	R	3, 4	float	
0x4EA	1258	4	Energy (15 min) 118	R	3, 4	float	
0x4EC	1260	4	Energy (15 min) 119	R	3, 4	float	
0x4EE	1262	4	Energy (15 min) 120	R	3, 4	float	

Měření / 24 hodinové registry (nulují se v 00:00)

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x500	1280	4	Energy (24h) 1	R	3, 4	float		Energy = "Pulse Count" / "PPU"
0x502	1282	4	Energy (24h) 2	R	3, 4	float		
0x504	1284	4	Energy (24h) 3	R	3, 4	float		
0x506	1286	4	Energy (24h) 4	R	3, 4	float		
0x508	1288	4	Energy (24h) 5	R	3, 4	float		
0x50A	1290	4	Energy (24h) 6	R	3, 4	float		
0x50C	1292	4	Energy (24h) 7	R	3, 4	float		
0x50E	1294	4	Energy (24h) 8	R	3, 4	float		
0x510	1296	4	Energy (24h) 9	R	3, 4	float		
0x512	1298	4	Energy (24h) 10	R	3, 4	float		
0x514	1300	4	Energy (24h) 11	R	3, 4	float		
0x516	1302	4	Energy (24h) 12	R	3, 4	float		
0x518	1304	4	Energy (24h) 13	R	3, 4	float		
0x51A	1306	4	Energy (24h) 14	R	3, 4	float		
0x51C	1308	4	Energy (24h) 15	R	3, 4	float		
0x51E	1310	4	Energy (24h) 16	R	3, 4	float		
0x520	1312	4	Energy (24h) 17	R	3, 4	float		
0x522	1314	4	Energy (24h) 18	R	3, 4	float		
0x524	1316	4	Energy (24h) 19	R	3, 4	float		
0x526	1318	4	Energy (24h) 20	R	3, 4	float		
0x528	1320	4	Energy (24h) 21	R	3, 4	float		
0x52A	1322	4	Energy (24h) 22	R	3, 4	float		
0x52C	1324	4	Energy (24h) 23	R	3, 4	float		
0x52E	1326	4	Energy (24h) 24	R	3, 4	float		
0x530	1328	4	Energy (24h) 25	R	3, 4	float		
0x532	1330	4	Energy (24h) 26	R	3, 4	float		
0x534	1332	4	Energy (24h) 27	R	3, 4	float		
0x536	1334	4	Energy (24h) 28	R	3, 4	float		
0x538	1336	4	Energy (24h) 29	R	3, 4	float		
0x53A	1338	4	Energy (24h) 30	R	3, 4	float		
0x53C	1340	4	Energy (24h) 31	R	3, 4	float		
0x53E	1342	4	Energy (24h) 32	R	3, 4	float		
0x540	1344	4	Energy (24h) 33	R	3, 4	float		
0x542	1346	4	Energy (24h) 34	R	3, 4	float		
0x544	1348	4	Energy (24h) 35	R	3, 4	float		
0x546	1350	4	Energy (24h) 36	R	3, 4	float		
0x548	1352	4	Energy (24h) 37	R	3, 4	float		
0x54A	1354	4	Energy (24h) 38	R	3, 4	float		
0x54C	1356	4	Energy (24h) 39	R	3, 4	float		
0x54E	1358	4	Energy (24h) 40	R	3, 4	float		
0x550	1360	4	Energy (24h) 41	R	3, 4	float		
0x552	1362	4	Energy (24h) 42	R	3, 4	float		
0x554	1364	4	Energy (24h) 43	R	3, 4	float		
0x556	1366	4	Energy (24h) 44	R	3, 4	float		
0x558	1368	4	Energy (24h) 45	R	3, 4	float		
0x55A	1370	4	Energy (24h) 46	R	3, 4	float		
0x55C	1372	4	Energy (24h) 47	R	3, 4	float		
0x55E	1374	4	Energy (24h) 48	R	3, 4	float		
0x560	1376	4	Energy (24h) 49	R	3, 4	float		
0x562	1378	4	Energy (24h) 50	R	3, 4	float		
0x564	1380	4	Energy (24h) 51	R	3, 4	float		
0x566	1382	4	Energy (24h) 52	R	3, 4	float		
0x568	1384	4	Energy (24h) 53	R	3, 4	float		
0x56A	1386	4	Energy (24h) 54	R	3, 4	float		
0x56C	1388	4	Energy (24h) 55	R	3, 4	float		
0x56E	1390	4	Energy (24h) 56	R	3, 4	float		
0x570	1392	4	Energy (24h) 57	R	3, 4	float		
0x572	1394	4	Energy (24h) 58	R	3, 4	float		
0x574	1396	4	Energy (24h) 59	R	3, 4	float		

0x576	1398	4	Energy (24h) 60	R	3, 4	float		
0x578	1400	4	Energy (24h) 61	R	3, 4	float		
0x57A	1402	4	Energy (24h) 62	R	3, 4	float		
0x57C	1404	4	Energy (24h) 63	R	3, 4	float		
0x57E	1406	4	Energy (24h) 64	R	3, 4	float		
0x580	1408	4	Energy (24h) 65	R	3, 4	float		
0x582	1410	4	Energy (24h) 66	R	3, 4	float		
0x584	1412	4	Energy (24h) 67	R	3, 4	float		
0x586	1414	4	Energy (24h) 68	R	3, 4	float		
0x588	1416	4	Energy (24h) 69	R	3, 4	float		
0x58A	1418	4	Energy (24h) 70	R	3, 4	float		
0x58C	1420	4	Energy (24h) 71	R	3, 4	float		
0x58E	1422	4	Energy (24h) 72	R	3, 4	float		
0x590	1424	4	Energy (24h) 73	R	3, 4	float		
0x592	1426	4	Energy (24h) 74	R	3, 4	float		
0x594	1428	4	Energy (24h) 75	R	3, 4	float		
0x596	1430	4	Energy (24h) 76	R	3, 4	float		
0x598	1432	4	Energy (24h) 77	R	3, 4	float		
0x59A	1434	4	Energy (24h) 78	R	3, 4	float		
0x59C	1436	4	Energy (24h) 79	R	3, 4	float		
0x59E	1438	4	Energy (24h) 80	R	3, 4	float		
0x5A0	1440	4	Energy (24h) 81	R	3, 4	float		
0x5A2	1442	4	Energy (24h) 82	R	3, 4	float		
0x5A4	1444	4	Energy (24h) 83	R	3, 4	float		
0x5A6	1446	4	Energy (24h) 84	R	3, 4	float		
0x5A8	1448	4	Energy (24h) 85	R	3, 4	float		
0x5AA	1450	4	Energy (24h) 86	R	3, 4	float		
0x5AC	1452	4	Energy (24h) 87	R	3, 4	float		
0x5AE	1454	4	Energy (24h) 88	R	3, 4	float		
0x5B0	1456	4	Energy (24h) 89	R	3, 4	float		
0x5B2	1458	4	Energy (24h) 90	R	3, 4	float		
0x5B4	1460	4	Energy (24h) 91	R	3, 4	float		
0x5B6	1462	4	Energy (24h) 92	R	3, 4	float		
0x5B8	1464	4	Energy (24h) 93	R	3, 4	float		
0x5BA	1466	4	Energy (24h) 94	R	3, 4	float		
0x5BC	1468	4	Energy (24h) 95	R	3, 4	float		
0x5BE	1470	4	Energy (24h) 96	R	3, 4	float		
0x5C0	1472	4	Energy (24h) 97	R	3, 4	float		
0x5C2	1474	4	Energy (24h) 98	R	3, 4	float		
0x5C4	1476	4	Energy (24h) 99	R	3, 4	float		
0x5C6	1478	4	Energy (24h) 100	R	3, 4	float		
0x5C8	1480	4	Energy (24h) 101	R	3, 4	float		
0x5CA	1482	4	Energy (24h) 102	R	3, 4	float		
0x5CC	1484	4	Energy (24h) 103	R	3, 4	float		
0x5CE	1486	4	Energy (24h) 104	R	3, 4	float		
0x5D0	1488	4	Energy (24h) 105	R	3, 4	float		
0x5D2	1490	4	Energy (24h) 106	R	3, 4	float		
0x5D4	1492	4	Energy (24h) 107	R	3, 4	float		
0x5D6	1494	4	Energy (24h) 108	R	3, 4	float		
0x5D8	1496	4	Energy (24h) 109	R	3, 4	float		
0x5DA	1498	4	Energy (24h) 110	R	3, 4	float		
0x5DC	1500	4	Energy (24h) 111	R	3, 4	float		
0x5DE	1502	4	Energy (24h) 112	R	3, 4	float		
0x5E0	1504	4	Energy (24h) 113	R	3, 4	float		
0x5E2	1506	4	Energy (24h) 114	R	3, 4	float		
0x5E4	1508	4	Energy (24h) 115	R	3, 4	float		
0x5E6	1510	4	Energy (24h) 116	R	3, 4	float		
0x5E8	1512	4	Energy (24h) 117	R	3, 4	float		
0x5EA	1514	4	Energy (24h) 118	R	3, 4	float		
0x5EC	1516	4	Energy (24h) 119	R	3, 4	float		
0x5EE	1518	4	Energy (24h) 120	R	3, 4	float		

Měření / okamžitý výkon (výpočtem z periody mezi impulzy)

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x600	1536	4	Power 1	R	3, 4	float	kW	(energy per hour)
0x602	1538	4	Power 2	R	3, 4	float		
0x604	1540	4	Power 3	R	3, 4	float		
0x606	1542	4	Power 4	R	3, 4	float		
0x608	1544	4	Power 5	R	3, 4	float		
0x60A	1546	4	Power 6	R	3, 4	float		
0x60C	1548	4	Power 7	R	3, 4	float		

0x60E	1550	4	Power 8	R	3, 4	float
0x610	1552	4	Power 9	R	3, 4	float
0x612	1554	4	Power 10	R	3, 4	float
0x614	1556	4	Power 11	R	3, 4	float
0x616	1558	4	Power 12	R	3, 4	float
0x618	1560	4	Power 13	R	3, 4	float
0x61A	1562	4	Power 14	R	3, 4	float
0x61C	1564	4	Power 15	R	3, 4	float
0x61E	1566	4	Power 16	R	3, 4	float
0x620	1568	4	Power 17	R	3, 4	float
0x622	1570	4	Power 18	R	3, 4	float
0x624	1572	4	Power 19	R	3, 4	float
0x626	1574	4	Power 20	R	3, 4	float
0x628	1576	4	Power 21	R	3, 4	float
0x62A	1578	4	Power 22	R	3, 4	float
0x62C	1580	4	Power 23	R	3, 4	float
0x62E	1582	4	Power 24	R	3, 4	float
0x630	1584	4	Power 25	R	3, 4	float
0x632	1586	4	Power 26	R	3, 4	float
0x634	1588	4	Power 27	R	3, 4	float
0x636	1590	4	Power 28	R	3, 4	float
0x638	1592	4	Power 29	R	3, 4	float
0x63A	1594	4	Power 30	R	3, 4	float
0x63C	1596	4	Power 31	R	3, 4	float
0x63E	1598	4	Power 32	R	3, 4	float
0x640	1600	4	Power 33	R	3, 4	float
0x642	1602	4	Power 34	R	3, 4	float
0x644	1604	4	Power 35	R	3, 4	float
0x646	1606	4	Power 36	R	3, 4	float
0x648	1608	4	Power 37	R	3, 4	float
0x64A	1610	4	Power 38	R	3, 4	float
0x64C	1612	4	Power 39	R	3, 4	float
0x64E	1614	4	Power 40	R	3, 4	float
0x650	1616	4	Power 41	R	3, 4	float
0x652	1618	4	Power 42	R	3, 4	float
0x654	1620	4	Power 43	R	3, 4	float
0x656	1622	4	Power 44	R	3, 4	float
0x658	1624	4	Power 45	R	3, 4	float
0x65A	1626	4	Power 46	R	3, 4	float
0x65C	1628	4	Power 47	R	3, 4	float
0x65E	1630	4	Power 48	R	3, 4	float
0x660	1632	4	Power 49	R	3, 4	float
0x662	1634	4	Power 50	R	3, 4	float
0x664	1636	4	Power 51	R	3, 4	float
0x666	1638	4	Power 52	R	3, 4	float
0x668	1640	4	Power 53	R	3, 4	float
0x66A	1642	4	Power 54	R	3, 4	float
0x66C	1644	4	Power 55	R	3, 4	float
0x66E	1646	4	Power 56	R	3, 4	float
0x670	1648	4	Power 57	R	3, 4	float
0x672	1650	4	Power 58	R	3, 4	float
0x674	1652	4	Power 59	R	3, 4	float
0x676	1654	4	Power 60	R	3, 4	float
0x678	1656	4	Power 61	R	3, 4	float
0x67A	1658	4	Power 62	R	3, 4	float
0x67C	1660	4	Power 63	R	3, 4	float
0x67E	1662	4	Power 64	R	3, 4	float
0x680	1664	4	Power 65	R	3, 4	float
0x682	1666	4	Power 66	R	3, 4	float
0x684	1668	4	Power 67	R	3, 4	float
0x686	1670	4	Power 68	R	3, 4	float
0x688	1672	4	Power 69	R	3, 4	float
0x68A	1674	4	Power 70	R	3, 4	float
0x68C	1676	4	Power 71	R	3, 4	float
0x68E	1678	4	Power 72	R	3, 4	float
0x690	1680	4	Power 73	R	3, 4	float
0x692	1682	4	Power 74	R	3, 4	float
0x694	1684	4	Power 75	R	3, 4	float
0x696	1686	4	Power 76	R	3, 4	float
0x698	1688	4	Power 77	R	3, 4	float
0x69A	1690	4	Power 78	R	3, 4	float
0x69C	1692	4	Power 79	R	3, 4	float
0x69E	1694	4	Power 80	R	3, 4	float
0x6A0	1696	4	Power 81	R	3, 4	float

0x6A2	1698	4	Power 82	R	3, 4	float		
0x6A4	1700	4	Power 83	R	3, 4	float		
0x6A6	1702	4	Power 84	R	3, 4	float		
0x6A8	1704	4	Power 85	R	3, 4	float		
0x6AA	1706	4	Power 86	R	3, 4	float		
0x6AC	1708	4	Power 87	R	3, 4	float		
0x6AE	1710	4	Power 88	R	3, 4	float		
0x6B0	1712	4	Power 89	R	3, 4	float		
0x6B2	1714	4	Power 90	R	3, 4	float		
0x6B4	1716	4	Power 91	R	3, 4	float		
0x6B6	1718	4	Power 92	R	3, 4	float		
0x6B8	1720	4	Power 93	R	3, 4	float		
0x6BA	1722	4	Power 94	R	3, 4	float		
0x6BC	1724	4	Power 95	R	3, 4	float		
0x6BE	1726	4	Power 96	R	3, 4	float		
0x6C0	1728	4	Power 97	R	3, 4	float		
0x6C2	1730	4	Power 98	R	3, 4	float		
0x6C4	1732	4	Power 99	R	3, 4	float		
0x6C6	1734	4	Power 100	R	3, 4	float		
0x6C8	1736	4	Power 101	R	3, 4	float		
0x6CA	1738	4	Power 102	R	3, 4	float		
0x6CC	1740	4	Power 103	R	3, 4	float		
0x6CE	1742	4	Power 104	R	3, 4	float		
0x6D0	1744	4	Power 105	R	3, 4	float		
0x6D2	1746	4	Power 106	R	3, 4	float		
0x6D4	1748	4	Power 107	R	3, 4	float		
0x6D6	1750	4	Power 108	R	3, 4	float		
0x6D8	1752	4	Power 109	R	3, 4	float		
0x6DA	1754	4	Power 110	R	3, 4	float		
0x6DC	1756	4	Power 111	R	3, 4	float		
0x6DE	1758	4	Power 112	R	3, 4	float		
0x6E0	1760	4	Power 113	R	3, 4	float		
0x6E2	1762	4	Power 114	R	3, 4	float		
0x6E4	1764	4	Power 115	R	3, 4	float		
0x6E6	1766	4	Power 116	R	3, 4	float		
0x6E8	1768	4	Power 117	R	3, 4	float		
0x6EA	1770	4	Power 118	R	3, 4	float		
0x6EC	1772	4	Power 119	R	3, 4	float		
0x6EE	1774	4	Power 120	R	3, 4	float		

Měření / status

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x700	1792	2	RTC/year	R	3, 4	uint16		
0x701	1793	2	RTC/month	R	3, 4	uint16		
0x702	1794	2	RTC/day	R	3, 4	uint16		
0x703	1795	2	RTC/hour	R	3, 4	uint16		
0x704	1796	2	RTC/minute	R	3, 4	uint16		
0x705	1797	2	RTC/second	R	3, 4	uint16		
0x706	1798	4	System Ticks	R	3, 4	uint32		x10ms
0x708	1800	4	**Sync. Time**	R	3, 4	uint32	s	time from SYNC signal
0x70A	1802	4	Status Flags	R	3, 4	uint32		b0 … TARIF 2 b1 … sync time is running b2 … sync OK b3 … outputs inverted
0x70C	1804	4	Error Flags	R	3, 4	uint32		b0 … RTC error b1 … RTC osc fail b2 … RTC low battery b3 … SYNC wait b4 … SYNC absent b5 … FRAM error b6 … DATAFLASH error b7 … POWER 24V error b8-b11 … OUTPUT module error b12-b15 … ATS input module error b16 … ECT input module error b17 … OUTPUT model - manual b18 ... SYNC unstable b19 ... RESTART flag
0x70E	1806	4	Params Checksum	R	3, 4	uint32		param change detection
0x710	1808	4	**Outputs State**	R	3, 4	uint32		b0=OUTPUT 1, b1=OUTPUT 2, …
0x712	1810	4	Outputs Manual	R	3, 4	uint32		b0=OUTPUT 1, b1=OUTPUT 2, …

0x714	1812	2	Inputs States 1 - 16	R	3, 4		b0=INPUT 1, b1=INPUT 2, …
0x715	1813	2	Inputs States 17 - 32	R	3, 4		b0=INPUT 17, b1=INPUT 18, …
0x716	1814	2	Inputs States 33 - 48	R	3, 4		b0=INPUT 33, b1=INPUT 34, …
0x717	1815	2	Inputs States 49 -64	R	3, 4		b0=INPUT 49, b1=INPUT 50, …
0x718	1816	2	Inputs States 65 - 80	R	3, 4		b0=INPUT 65, b1=INPUT 66, …
0x719	1817	2	Inputs States 81 - 96	R	3, 4		b0=INPUT 81, b1=INPUT 82, …
0x71A	1818	2	Inputs States 97 - 112	R	3, 4		b0=INPUT 97, b1=INPUT 98, …
0x71B	1819	2	Inputs States 113 - 120	R	3, 4		b0=INPUT 113, b1=INPUT 114, …
0x71C	1820	2	**Regulation**, status	R	3, 4	uint16	0 = **IDLE** (stopped: no sync, no limit) 1 = **LOW POWER** 2 = **OPTIMAL POWER** 3 = **HIGH POWER** 4 = **OVERLIMIT**
0x71D	1821	4	Regulation, **limit**	R	3, 4	uint32	**RegMax**[T1/T2] (**rezervovaná kapacita**)
0x71F	1823	4	Regulation, **top power limit**	R	3, 4	uint32	**rezervovaný příkon**
0x721	1825	4	Regulation, **value**	R	3, 4	uint32	Main MSR - current **integral value**
0x723	1827	4	Regulation, **prediction**	R	3, 4	uint32	Main MSR - **predicted value**
0x725	1829	2	Regulation, **power**	R	3, 4	uint16	Main MSR - **instantaneous power**
0x726	1830	2	Regulation, **power-free**	R	3, 4	int16	**signed!** Free power = limit - prediction **Note**: limited by **top power limit** or **RegMax**

Měření / registry impulzů

W* *-zápis povolen pouze za podmínky, kdy měření není mapováno, tzn.* ***i/o module=0, input=0***

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x800	2048	4	Total Counter 1	R/W*	3, 4	uint32		
0x802	2050	4	Total Counter 2	R/W*	3, 4	uint32		
0x804	2052	4	Total Counter 3	R/W*	3, 4	uint32		
0x806	2054	4	Total Counter 4	R/W*	3, 4	uint32		
0x808	2056	4	Total Counter 5	R/W*	3, 4	uint32		
0x80A	2058	4	Total Counter 6	R/W*	3, 4	uint32		
0x80C	2060	4	Total Counter 7	R/W*	3, 4	uint32		
0x80E	2062	4	Total Counter 8	R/W*	3, 4	uint32		
0x810	2064	4	Total Counter 9	R/W*	3, 4	uint32		
0x812	2066	4	Total Counter 10	R/W*	3, 4	uint32		
0x814	2068	4	Total Counter 11	R/W*	3, 4	uint32		
0x816	2070	4	Total Counter 12	R/W*	3, 4	uint32		
0x818	2072	4	Total Counter 13	R/W*	3, 4	uint32		
0x81A	2074	4	Total Counter 14	R/W*	3, 4	uint32		
0x81C	2076	4	Total Counter 15	R/W*	3, 4	uint32		
0x81E	2078	4	Total Counter 16	R/W*	3, 4	uint32		
0x820	2080	4	Total Counter 17	R/W*	3, 4	uint32		
0x822	2082	4	Total Counter 18	R/W*	3, 4	uint32		
0x824	2084	4	Total Counter 19	R/W*	3, 4	uint32		
0x826	2086	4	Total Counter 20	R/W*	3, 4	uint32		
0x828	2088	4	Total Counter 21	R/W*	3, 4	uint32		
0x82A	2090	4	Total Counter 22	R/W*	3, 4	uint32		
0x82C	2092	4	Total Counter 23	R/W*	3, 4	uint32		
0x82E	2094	4	Total Counter 24	R/W*	3, 4	uint32		
0x830	2096	4	Total Counter 25	R/W*	3, 4	uint32		
0x832	2098	4	Total Counter 26	R/W*	3, 4	uint32		
0x834	2100	4	Total Counter 27	R/W*	3, 4	uint32		
0x836	2102	4	Total Counter 28	R/W*	3, 4	uint32		
0x838	2104	4	Total Counter 29	R/W*	3, 4	uint32		
0x83A	2106	4	Total Counter 30	R/W*	3, 4	uint32		
0x83C	2108	4	Total Counter 31	R/W*	3, 4	uint32		
0x83E	2110	4	Total Counter 32	R/W*	3, 4	uint32		
0x840	2112	4	Total Counter 33	R/W*	3, 4	uint32		
0x842	2114	4	Total Counter 34	R/W*	3, 4	uint32		
0x844	2116	4	Total Counter 35	R/W*	3, 4	uint32		
0x846	2118	4	Total Counter 36	R/W*	3, 4	uint32		
0x848	2120	4	Total Counter 37	R/W*	3, 4	uint32		
0x84A	2122	4	Total Counter 38	R/W*	3, 4	uint32		
0x84C	2124	4	Total Counter 39	R/W*	3, 4	uint32		
0x84E	2126	4	Total Counter 40	R/W*	3, 4	uint32		
0x850	2128	4	Total Counter 41	R/W*	3, 4	uint32		
0x852	2130	4	Total Counter 42	R/W*	3, 4	uint32		
0x854	2132	4	Total Counter 43	R/W*	3, 4	uint32		
0x856	2134	4	Total Counter 44	R/W*	3, 4	uint32		
0x858	2136	4	Total Counter 45	R/W*	3, 4	uint32		
0x85A	2138	4	Total Counter 46	R/W*	3, 4	uint32		
0x85C	2140	4	Total Counter 47	R/W*	3, 4	uint32		
0x85E	2142	4	Total Counter 48	R/W*	3, 4	uint32		

0x860	2144	4	Total Counter 49	R/W*	3, 4	uint32
0x862	2146	4	Total Counter 50	R/W*	3, 4	uint32
0x864	2148	4	Total Counter 51	R/W*	3, 4	uint32
0x866	2150	4	Total Counter 52	R/W*	3, 4	uint32
0x868	2152	4	Total Counter 53	R/W*	3, 4	uint32
0x86A	2154	4	Total Counter 54	R/W*	3, 4	uint32
0x86C	2156	4	Total Counter 55	R/W*	3, 4	uint32
0x86E	2158	4	Total Counter 56	R/W*	3, 4	uint32
0x870	2160	4	Total Counter 57	R/W*	3, 4	uint32
0x872	2162	4	Total Counter 58	R/W*	3, 4	uint32
0x874	2164	4	Total Counter 59	R/W*	3, 4	uint32
0x876	2166	4	Total Counter 60	R/W*	3, 4	uint32
0x878	2168	4	Total Counter 61	R/W*	3, 4	uint32
0x87A	2170	4	Total Counter 62	R/W*	3, 4	uint32
0x87C	2172	4	Total Counter 63	R/W*	3, 4	uint32
0x87E	2174	4	Total Counter 64	R/W*	3, 4	uint32
0x880	2176	4	Total Counter 65	R/W*	3, 4	uint32
0x882	2178	4	Total Counter 66	R/W*	3, 4	uint32
0x884	2180	4	Total Counter 67	R/W*	3, 4	uint32
0x886	2182	4	Total Counter 68	R/W*	3, 4	uint32
0x888	2184	4	Total Counter 69	R/W*	3, 4	uint32
0x88A	2186	4	Total Counter 70	R/W*	3, 4	uint32
0x88C	2188	4	Total Counter 71	R/W*	3, 4	uint32
0x88E	2190	4	Total Counter 72	R/W*	3, 4	uint32
0x890	2192	4	Total Counter 73	R/W*	3, 4	uint32
0x892	2194	4	Total Counter 74	R/W*	3, 4	uint32
0x894	2196	4	Total Counter 75	R/W*	3, 4	uint32
0x896	2198	4	Total Counter 76	R/W*	3, 4	uint32
0x898	2200	4	Total Counter 77	R/W*	3, 4	uint32
0x89A	2202	4	Total Counter 78	R/W*	3, 4	uint32
0x89C	2204	4	Total Counter 79	R/W*	3, 4	uint32
0x89E	2206	4	Total Counter 80	R/W*	3, 4	uint32
0x8A0	2208	4	Total Counter 81	R/W*	3, 4	uint32
0x8A2	2210	4	Total Counter 82	R/W*	3, 4	uint32
0x8A4	2212	4	Total Counter 83	R/W*	3, 4	uint32
0x8A6	2214	4	Total Counter 84	R/W*	3, 4	uint32
0x8A8	2216	4	Total Counter 85	R/W*	3, 4	uint32
0x8AA	2218	4	Total Counter 86	R/W*	3, 4	uint32
0x8AC	2220	4	Total Counter 87	R/W*	3, 4	uint32
0x8AE	2222	4	Total Counter 88	R/W*	3, 4	uint32
0x8B0	2224	4	Total Counter 89	R/W*	3, 4	uint32
0x8B2	2226	4	Total Counter 90	R/W*	3, 4	uint32
0x8B4	2228	4	Total Counter 91	R/W*	3, 4	uint32
0x8B6	2230	4	Total Counter 92	R/W*	3, 4	uint32
0x8B8	2232	4	Total Counter 93	R/W*	3, 4	uint32
0x8BA	2234	4	Total Counter 94	R/W*	3, 4	uint32
0x8BC	2236	4	Total Counter 95	R/W*	3, 4	uint32
0x8BE	2238	4	Total Counter 96	R/W*	3, 4	uint32
0x8C0	2240	4	Total Counter 97	R/W*	3, 4	uint32
0x8C2	2242	4	Total Counter 98	R/W*	3, 4	uint32
0x8C4	2244	4	Total Counter 99	R/W*	3, 4	uint32
0x8C6	2246	4	Total Counter 100	R/W*	3, 4	uint32
0x8C8	2248	4	Total Counter 101	R/W*	3, 4	uint32
0x8CA	2250	4	Total Counter 102	R/W*	3, 4	uint32
0x8CC	2252	4	Total Counter 103	R/W*	3, 4	uint32
0x8CE	2254	4	Total Counter 104	R/W*	3, 4	uint32
0x8D0	2256	4	Total Counter 105	R/W*	3, 4	uint32
0x8D2	2258	4	Total Counter 106	R/W*	3, 4	uint32
0x8D4	2260	4	Total Counter 107	R/W*	3, 4	uint32
0x8D6	2262	4	Total Counter 108	R/W*	3, 4	uint32
0x8D8	2264	4	Total Counter 109	R/W*	3, 4	uint32
0x8DA	2266	4	Total Counter 110	R/W*	3, 4	uint32
0x8DC	2268	4	Total Counter 111	R/W*	3, 4	uint32
0x8DE	2270	4	Total Counter 112	R/W*	3, 4	uint32
0x8E0	2272	4	Total Counter 113	R/W*	3, 4	uint32
0x8E2	2274	4	Total Counter 114	R/W*	3, 4	uint32
0x8E4	2276	4	Total Counter 115	R/W*	3, 4	uint32
0x8E6	2278	4	Total Counter 116	R/W*	3, 4	uint32
0x8E8	2280	4	Total Counter 117	R/W*	3, 4	uint32
0x8EA	2282	4	Total Counter 118	R/W*	3, 4	uint32
0x8EC	2284	4	Total Counter 119	R/W*	3, 4	uint32
0x8EE	2286	4	Total Counter 120	R/W*	3, 4	uint32

Měření / registry energie (od verze 3.23.9.12)

Pozor, registry energie nejsou synchronní s registry impulzů (odlišný postup vyhodnocení měření)!

Addr (HEX)	Addr (DEC)	Size (byte)	Register description	Access	MODBUS function	Data format	Unit	Notes
0x900	2304	4	Total energy 1	R	3, 4	uint32		kWh
0x902	2306	4	Total energy 2	R	3, 4	uint32		
0x904	2308	4	Total energy 3	R	3, 4	uint32		
0x906	2310	4	Total energy 4	R	3, 4	uint32		
0x908	2312	4	Total energy 5	R	3, 4	uint32		
0x90A	2314	4	Total energy 6	R	3, 4	uint32		
0x90C	2316	4	Total energy 7	R	3, 4	uint32		
0x90E	2318	4	Total energy 8	R	3, 4	uint32		
0x910	2320	4	Total energy 9	R	3, 4	uint32		
0x912	2322	4	Total energy 10	R	3, 4	uint32		
0x914	2324	4	Total energy 11	R	3, 4	uint32		
0x916	2326	4	Total energy 12	R	3, 4	uint32		
0x918	2328	4	Total energy 13	R	3, 4	uint32		
0x91A	2330	4	Total energy 14	R	3, 4	uint32		
0x91C	2332	4	Total energy 15	R	3, 4	uint32		
0x91E	2334	4	Total energy 16	R	3, 4	uint32		
0x920	2336	4	Total energy 17	R	3, 4	uint32		
0x922	2338	4	Total energy 18	R	3, 4	uint32		
0x924	2340	4	Total energy 19	R	3, 4	uint32		
0x926	2342	4	Total energy 20	R	3, 4	uint32		
0x928	2344	4	Total energy 21	R	3, 4	uint32		
0x92A	2346	4	Total energy 22	R	3, 4	uint32		
0x92C	2348	4	Total energy 23	R	3, 4	uint32		
0x92E	2350	4	Total energy 24	R	3, 4	uint32		
0x930	2352	4	Total energy 25	R	3, 4	uint32		
0x932	2354	4	Total energy 26	R	3, 4	uint32		
0x934	2356	4	Total energy 27	R	3, 4	uint32		
0x936	2358	4	Total energy 28	R	3, 4	uint32		
0x938	2360	4	Total energy 29	R	3, 4	uint32		
0x93A	2362	4	Total energy 30	R	3, 4	uint32		
0x93C	2364	4	Total energy 31	R	3, 4	uint32		
0x93E	2366	4	Total energy 32	R	3, 4	uint32		
0x940	2368	4	Total energy 33	R	3, 4	uint32		
0x942	2370	4	Total energy 34	R	3, 4	uint32		
0x944	2372	4	Total energy 35	R	3, 4	uint32		
0x946	2374	4	Total energy 36	R	3, 4	uint32		
0x948	2376	4	Total energy 37	R	3, 4	uint32		
0x94A	2378	4	Total energy 38	R	3, 4	uint32		
0x94C	2380	4	Total energy 39	R	3, 4	uint32		
0x94E	2382	4	Total energy 40	R	3, 4	uint32		
0x950	2384	4	Total energy 41	R	3, 4	uint32		
0x952	2386	4	Total energy 42	R	3, 4	uint32		
0x954	2388	4	Total energy 43	R	3, 4	uint32		
0x956	2390	4	Total energy 44	R	3, 4	uint32		
0x958	2392	4	Total energy 45	R	3, 4	uint32		
0x95A	2394	4	Total energy 46	R	3, 4	uint32		
0x95C	2396	4	Total energy 47	R	3, 4	uint32		
0x95E	2398	4	Total energy 48	R	3, 4	uint32		
0x960	2400	4	Total energy 49	R	3, 4	uint32		
0x962	2402	4	Total energy 50	R	3, 4	uint32		
0x964	2404	4	Total energy 51	R	3, 4	uint32		
0x966	2406	4	Total energy 52	R	3, 4	uint32		
0x968	2408	4	Total energy 53	R	3, 4	uint32		
0x96A	2410	4	Total energy 54	R	3, 4	uint32		
0x96C	2412	4	Total energy 55	R	3, 4	uint32		
0x96E	2414	4	Total energy 56	R	3, 4	uint32		
0x970	2416	4	Total energy 57	R	3, 4	uint32		
0x972	2418	4	Total energy 58	R	3, 4	uint32		
0x974	2420	4	Total energy 59	R	3, 4	uint32		
0x976	2422	4	Total energy 60	R	3, 4	uint32		
0x978	2424	4	Total energy 61	R	3, 4	uint32		
0x97A	2426	4	Total energy 62	R	3, 4	uint32		
0x97C	2428	4	Total energy 63	R	3, 4	uint32		
0x97E	2430	4	Total energy 64	R	3, 4	uint32		
0x980	2432	4	Total energy 65	R	3, 4	uint32		
0x982	2434	4	Total energy 66	R	3, 4	uint32		
0x984	2436	4	Total energy 67	R	3, 4	uint32		
0x986	2438	4	Total energy 68	R	3, 4	uint32		
0x988	2440	4	Total energy 69	R	3, 4	uint32		

0x98A	2442	4	Total energy 70	R	3, 4	uint32
0x98C	2444	4	Total energy 71	R	3, 4	uint32
0x98E	2446	4	Total energy 72	R	3, 4	uint32
0x990	2448	4	Total energy 73	R	3, 4	uint32
0x992	2450	4	Total energy 74	R	3, 4	uint32
0x994	2452	4	Total energy 75	R	3, 4	uint32
0x996	2454	4	Total energy 76	R	3, 4	uint32
0x998	2456	4	Total energy 77	R	3, 4	uint32
0x99A	2458	4	Total energy 78	R	3, 4	uint32
0x99C	2460	4	Total energy 79	R	3, 4	uint32
0x99E	2462	4	Total energy 80	R	3, 4	uint32
0x9A0	2464	4	Total energy 81	R	3, 4	uint32
0x9A2	2466	4	Total energy 82	R	3, 4	uint32
0x9A4	2468	4	Total energy 83	R	3, 4	uint32
0x9A6	2470	4	Total energy 84	R	3, 4	uint32
0x9A8	2472	4	Total energy 85	R	3, 4	uint32
0x9AA	2474	4	Total energy 86	R	3, 4	uint32
0x9AC	2476	4	Total energy 87	R	3, 4	uint32
0x9AE	2478	4	Total energy 88	R	3, 4	uint32
0x9B0	2480	4	Total energy 89	R	3, 4	uint32
0x9B2	2482	4	Total energy 90	R	3, 4	uint32
0x9B4	2484	4	Total energy 91	R	3, 4	uint32
0x9B6	2486	4	Total energy 92	R	3, 4	uint32
0x9B8	2488	4	Total energy 93	R	3, 4	uint32
0x9BA	2490	4	Total energy 94	R	3, 4	uint32
0x9BC	2492	4	Total energy 95	R	3, 4	uint32
0x9BE	2494	4	Total energy 96	R	3, 4	uint32
0x9C0	2496	4	Total energy 97	R	3, 4	uint32
0x9C2	2498	4	Total energy 98	R	3, 4	uint32
0x9C4	2500	4	Total energy 99	R	3, 4	uint32
0x9C6	2502	4	Total energy 100	R	3, 4	uint32
0x9C8	2504	4	Total energy 101	R	3, 4	uint32
0x9CA	2506	4	Total energy 102	R	3, 4	uint32
0x9CC	2508	4	Total energy 103	R	3, 4	uint32
0x9CE	2510	4	Total energy 104	R	3, 4	uint32
0x9D0	2512	4	Total energy 105	R	3, 4	uint32
0x9D2	2514	4	Total energy 106	R	3, 4	uint32
0x9D4	2516	4	Total energy 107	R	3, 4	uint32
0x9D6	2518	4	Total energy 108	R	3, 4	uint32
0x9D8	2520	4	Total energy 109	R	3, 4	uint32
0x9DA	2522	4	Total energy 110	R	3, 4	uint32
0x9DC	2524	4	Total energy 111	R	3, 4	uint32
0x9DE	2526	4	Total energy 112	R	3, 4	uint32
0x9E0	2528	4	Total energy 113	R	3, 4	uint32
0x9E2	2530	4	Total energy 114	R	3, 4	uint32
0x9E4	2532	4	Total energy 115	R	3, 4	uint32
0x9E6	2534	4	Total energy 116	R	3, 4	uint32
0x9E8	2536	4	Total energy 117	R	3, 4	uint32
0x9EA	2538	4	Total energy 118	R	3, 4	uint32
0x9EC	2540	4	Total energy 119	R	3, 4	uint32
0x9EE	2542	4	Total energy 120	R	3, 4	uint32