

ELR 5000 (ELM 5000) register list for devices with HMI firmware from V2.04 (check the installed version in your device's MENU in item ABOUT HW, SW)

Modbus address	Read coils (0x01)	Read holding registers (0x03)	Write single coil (0x05)	Write single register (0x06)	Write multiple registers (0x10)	Description	Access	Data type	Data length in bytes	Number of registers	Data	Example
0	x					Device class	R	uint(16)	2	1		41 = ELR 5000 Series
1	x					Device type	R	char	40	20	ASCII	ELR 5080-25
21	x					Manufacturer	R	char	40	20	ASCII	
41	x					Manufacturer address	R	char	40	20	ASCII	
61	x					Manufacturer ZIP code	R	char	40	20	ASCII	
81	x					Manufacturer phone number	R	char	40	20	ASCII	
101	x					Manufacturer website	R	char	40	20	ASCII	
121	x					Nominal voltage	R	float	4	2	Floating point number IEEE754	80
123	x					Nominal current	R	float	4	2	Floating point number IEEE754	25
125	x					Nominal power	R	float	4	2	Floating point number IEEE754	320
151	x					Article no.	R	char	40	20	ASCII	33220430
171	x					Serial no.	R	char	40	20	ASCII	100010002
191	x			x		User text	RW	char	40	20	ASCII	
211	x					Firmware version (HMI)	R	char	40	20	ASCII	V2.01 02.12.2015
231	x					Firmware version (DR)	R	char	40	20	ASCII	V2.0.1
402	x		x			Remote mode	RW	uint(16)	2	1	Coils : Remote	0x0000 = off; 0xFF00 = on
405	x		x			DC input	RW	uint(16)	2	1	Coils : Input	0x0000 = off; 0xFF00 = on
407	x		x			Condition of DC input after power fail alarm	RW	uint(16)	2	1	Coils : Auto-On	0x0000 = off; 0xFF00 = auto-on
408	x		x			Condition of DC input after powering the device	RW	uint(16)	2	1	Reg : Power-On	0xFFFF = off; 0xFFFE = restore
410			x			Restart of the device (warm start)	W	uint(16)	2	1	Coils : Restart	0xFF00 = execute
411			x			Acknowledge alarms	W	uint(16)	2	1	Coils : Alarms	0xFF00 = acknowledge
500		x		x		Set voltage value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)
501		x		x		Set current value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)
502		x		x		Set power value	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)
505		x				Device state	R	uint(32)	4	2	Bit 0-4 : Control location Bit 5 : - Bit 6 : - Bit 7 : Input state Bit 8 : - Bit 9-10 : Regulation mode Bit 11 : Remote control Bit 12 : - Bit 13 : Sequence mode Bit 14 : Remote sense Bit 15 : Alarms Bit 16 : OVP Bit 17 : OCP Bit 18 : OPP Bit 19 : OT Bit 20 : - Bit 21-23: Power fail Bit 24-31: -	0x00 = free; 0x01 = local; 0x06 = Ethernet 0 = off, 1 = on 00 = CV; 10 = CC; 11 = CP 0 = off, 1 = on 0 = stopped; 1 = running 0 = internal; 1 = external 0 = no alarm; 1 = min. one alarm active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active 0 = none; 1 = active
507		x				Actual voltage	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual voltage (for translation see programming guide)
508		x				Actual current	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual current (for translation see programming guide)
509		x				Actual power	R	uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual power (for translation see programming guide)
520		x				Count of OV alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count
521		x				Count of OC alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count
522		x				Count of OP alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count
523		x				Count of OT alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count
524		x				Count of PF alarms since power up	R	uint(16)	2	1	0x0000 - 0xFFFF	Count
550		x		x		Overvoltage protection threshold (OVP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)
553		x		x		Overcurrent protection threshold (OCP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)
556		x		x		Overpower protection threshold (OPP)	RW	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)
850	x		x			Sequence generator: Sequence: Start/stop	RW	uint(16)	2	1	Coils : Start/Stop	0x0000 = stop; 0xFF00 = start
859		x		x		Sequence generator: Start sequence point	RW	uint(16)	2	1	0x0001...0x0064	
860		x		x		Sequence generator: End sequence point	RW	uint(16)	2	1	0x0001...0x0064	
861		x		x		Sequence generator: Sequence cycles	RW	uint(16)	2	1	0x0000...0x03E7	0x0000 = infinite; 0x0001...0x03E7 = Number of sequence cycles
900		x			x	Sequence generator: Setup for sequence point 1	RW	float float float float	16	8	Bytes 0-3: U(DC) in V Bytes 4-7: I(DC) in A Bytes 8-11: P(DC) in W Bytes 12-15: Sequence point time in ms	Floating point number in IEEE754 format, see device manual for value range, chapter about sequence generator Integer, 1...36000000
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
1692		x			x	Sequence generator: Setup for sequence point 100	RW	float float float float	16	8	Bytes 0-3: U(DC) in V Bytes 4-7: I(DC) in A Bytes 8-11: P(DC) in W Bytes 12-15: Sequence point time in ms	Floating point number in IEEE754 format, see device manual for value range, chapter about sequence generator Integer, 1...36000000
9000		x		x		Upper limit of voltage set value (U-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)
9001		x		x		Lower limit of voltage set value (U-min)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)
9002		x		x		Upper limit of current set value (I-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)
9003		x		x		Lower limit of current set value (I-min)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide)
9004		x		x		Upper limit of power set value (P-max)	RW	uint(16)	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)
10007	x		x			Ethernet: TCP Keep-Alive	RW	uint(16)	2	1	Coils: TCP keep-alive	0x0000 = off; 0xFF00 = on
10008	x		x			Ethernet: DHCP	RW	uint(16)	2	1	Coils: DHCP on/off	0x0000 = off; 0xFF00 = on
10010	x		x			Protocol: Modbus	RW	uint(16)	2	1	Coils: MODBUS on/off	0x0000 = off; 0xFF00 = on
10011	x		x			Protocol: SCPI	RW	uint(16)	2	1	Coils: SCPI on/off	0x0000 = off; 0xFF00 = on
10502		x			x	Ethernet: IP address	RW	uint(8)	4	2	Bytes 0 - 3: 0.255	192.168.0.2 (default)
10504		x			x	Ethernet: Subnet mask	RW	uint(8)	4	2	Bytes 0 - 3: 0.255	255.255.255.0 (default)
10506		x			x	Ethernet: Gateway	RW	uint(8)	4	2	Bytes 0 - 3: 0.255	192.168.0.1 (default)
10508		x			x	Ethernet: Host name	RW	char	54	27	ASCII	"Client" (default)
10535		x			x	Ethernet: Domain name	RW	char	54	27	ASCII	"Workgroup" (default)
10562		x			x	Ethernet: DNS	RW	uint(8)	4	2	Bytes 0 - 3: 0.255	0.0.0.0 (default)
10567		x				Ethernet: MAC	R(W)	uint(8)	6	3	Bytes 0-6: 0.255	00:50:C2:C3:12:34 or 00:50-C2-C3-12-34
10572		x		x		Ethernet: Port	RW	uint(16)	2	1	0...65536 (except 80)	5025 (default)
10573		x		x		Ethernet: Interface connection timeout in seconds	RW	uint(16)	2	1	0...65535	5 sec (default)
11000		x			x	MPP Tracking: MPP-Mode	RW	uint(16)	2	1	0..4	0 (default), 1 (MPP1), 2 (MPP2), 3 (MPP3), 4 (MPP4)
11001		x			x	MPP Tracking: Uoc (Setup)	RW	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11002		x			x	MPP Tracking: Isc (Setup)	RW	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Current value in % of Inom (for translation see programming guide)
11003		x			x	MPP Tracking: Umpp (Setup)	RW	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11004		x			x	MPP Tracking: Imp (Setup)	RW	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Current value in % of Inom (for translation see programming guide)
11005		x			x	MPP Tracking: Pmpp (Setup)	RW	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Power value in % of Pnom (for translation see programming guide)
11006		x			x	MPP Tracking: DeltaP (Setup)	RW	uint(16)	2	1	0 - 50 W	Power value in % of Pnom (for translation see programming guide)
11007		x				MPP Tracking: Umpp (Result in MPP1/2/4)	R	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11008		x				MPP Tracking: Imp (Result in MPP1/2/4)	R	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Current value in % of Inom (for translation see programming guide)
11009		x				MPP Tracking: Pmpp (Result in MPP1/2/4)	R	uint(16)	2	1	0x0000 - 0xC000 (0 - 100%)	Power value in % of Pnom (for translation see programming guide)
11010		x			x	MPP Tracking: Start/Stop	RW	uint(16)	2	1	Coils: Start/Stop	0x0000 = stop; 0xFF00 = start
11011		x				MPP Tracking: Finished (Function status for MPP1/2/4)	R	uint(16)	2	1	Coils:	0x0000 = running; 0xFF00 = finished
11012		x				MPP Tracking: Error during function	R	uint(16)	2	1	Coils:	0x0000 = no error; 0xFF00 = error
11013		x			x	MPP-Tracking : Interval (Setup)	RW	uint(16)	2	1	0x0005 - 0xEA60	Regulation & measuring interval in milliseconds, either for tracking in modes 1 and 2 or for user curve progression in mode 3
11014		x			x	MPP4 : Start	RW	uint(16)	2	1	0x0001 - 0x0064	Start voltage value out of 100 (related to registers 11100-11199) for use in MPP4 mode
11015		x			x	MPP4 : End	RW	uint(16)	2	1	0x0001 - 0x0064	End voltage value out of 100 (related to registers 11100-11199) for use in MPP4 mode
11016		x			x	MPP4 : Repetitions	RW	uint(16)	2	1	0x0000 - 0xFFFF	0x0000 = no repetitions
11100		x			x	MPP Tracking: User curve (MPP4 mode) voltage values 1-20	RW	uint(16)	40	20	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11120		x			x	MPP Tracking: User curve (MPP4 mode) voltage values 21-40	RW	uint(16)	40	20	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11140		x			x	MPP Tracking: User curve (MPP4 mode) voltage values 41-60	RW	uint(16)	40	20	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11160		x			x	MPP Tracking: User curve (MPP4 mode) voltage values 61-80	RW	uint(16)	40	20	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11180		x			x	MPP Tracking: User curve (MPP4 mode) voltage values 81-100	RW	uint(16)	40	20	0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom (for translation see programming guide)
11200		x				MPP Tracking: User curve (MPP4 mode) results 1-10 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11230		x				MPP Tracking: User curve (MPP4 mode) results 11-20 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11260		x				MPP Tracking: User curve (MPP4 mode) results 21-30 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11290		x				MPP Tracking: User curve (MPP4 mode) results 31-40 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11320		x				MPP Tracking: User curve (MPP4 mode) results 41-50 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11350		x				MPP Tracking: User curve (MPP4 mode) results 51-60 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11380		x				MPP Tracking: User curve (MPP4 mode) results 61-70 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11410		x				MPP Tracking: User curve (MPP4 mode) results 71-80 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11440		x				MPP Tracking: User curve (MPP4 mode) results 81-90 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)
11470		x				MPP Tracking: User curve (MPP4 mode) results 91-100 (10x Unom, Imon, Pmon)	R	uint(16)	60	30	0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%) 0x0000 - 0xC000 (0 - 100%)	Voltage value in % of Unom Current value in % of Inom Power value in % of Pnom (for translation see programming guide)