

Change History:

Revision	Date	Changes (List)
1.00	28.06.2022	– Initial version-DRAFT
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Modbus Specification Webasto UNITE



Notice

The following description defines how the Webasto UNITE communicates with various Energy Management Systems regarding protocol requirements and data structure to enable dynamic control of energy flow.

Webasto is does not provide support on how to understand or implement this document. All problems that arise by usage of this document are in customer's responsibility. Additional support is available only for the partners in case of the cooperation (for example, implementation of new HEMS from the provider). Please contact your local Webasto Partner if this is the case.

Protocol requirements

Communication with the Webasto UNITE can be done via Modbus TCP.

Webasto UNITE provides its data as a Modbus server to the controlling device, which is the client or master in the network. Each Webasto UNITE must be addressed individually.

Parameter Modbus TCP

Each Wallbox UNITE must be given a unique IP.

Parameter	Value
IP-adress	AnyIPaddress; All WebastoUNITEon the same subnet (e.g., xxx.xxx.xxx.xxx)
Modbus Port	502
Modbus Unit ID	255

Address	Name	R/W	Nr.	Description	Type	Unit
[100,124]	Serial Number	R	25	Serial Number, currently 16 Digit	String	
[130,179]	Chargepoint ID	R	50	Charge point ID	String	
[190,199]	Brand	R	10	Charge point Brand	String	
[210,214]	Model	R	5	Charge point Model	String	
[230,279]	Firmware version	R	50	Firmware version	String	
290+291	Date	R	2	Current date of CP	UINT32	yyymmdd
294+295	Time	R	2	Current time of CP	UINT32	hhmmss
400+401	Chargepoint Power	R	2	Max power of Charge point	UINT32	W
404	Number of Phases	R	1	0: 1-phase 1: 3-phase	UINT16	
1000	Charge Point State	R	1	0: "Available", 1: "Preparing", 2: "Charging", 3: "SuspendedEVSE", 4: "SuspendedEV", 5: "Finishing", 6: "Reserved", 7: "Unavailable", 8: "Faulted",	UINT16	
1001	Charging State	R	1	0: Not Charging, State Ax, Bx,Dx or C1 1: Charging, state C2	UINT16	
1002	Equipment State	R	1	0: Initializing 1: Running 2: Fault 3: Disabled 4: Updating	UINT16	
1004	Cable State	R	1	0: Cable not connected 1: Cable connected, vehicle notconnected 2: Cable connected, vehicle connected 3: Cable connected, vehicle connected, cable locked	UINT16	
1006	EVSE Fault Code	R	2	0: No fault Other: Fault code	UINT32	
1008	Current L1	R	1	L1 Instantaneous Current	UINT16	mA
1010	Current L2	R	1	L2 Instantaneous Current	UINT16	mA
1012	Current L3	R	1	L3 Instantaneous Current	UINT16	mA
1014	Voltage L1	R	1	L1 Voltage	UINT16	V
1016	Voltage L2	R	1	L2 Voltage	UINT16	V
1018	Voltage L3	R	1	L3 Voltage	UINT16	V
1020+1021	Active Power Total	R	2	Total Active Power	UINT32	W
1024+1025	Active Power L1	R	2	L1 Active Power	UINT32	W
1028+1029	Active Power L2	R	2	L2 Active Power	UINT32	W
1032+1033	Active Power L3	R	2	L3 Active Power	UINT32	W
1036+1037	Meter Reading	R	2	Meter Reading	UINT32	0.1 kWh
1100	Session Max Current	R	1	Max possible charging current for active session	UINT16	A
1102	EVSE Min Current	R	1	Min possible charging current for EVSE	UINT16	A
1104	EVSE Max Current	R	1	Max possible charging current for EVSE	UINT16	A
1106	Cable Max Current	R	1	Max possible charging current for charging cable	UINT16	A

1502+1503	Session Energy	R	2	Total Energy for current charging session	UINT32	Wh
1504+1505	Session Start Time	R	2	Session start time	UINT32	hhmmss
1508+1509	Session Duration	R	2	Session duration	UINT32	s
1512+1513	Session End Time	R	2	Session end time	UINT32	hhmmss
2000	Failsafe Current	R/W	1	Failsafe charging current during communication failure	UINT16	A
2002	Failsafe Timeout	R/W	1	Communication timeout for switching to Failsafe charging current. If the timeout has occurred and the TCP socket is still active, TCP socket restarts. If set, Failsafe period is timeout/2, otherwise 20 sec.	UINT16	s
5004	Charging Current	R/W	1	Dynamic charging current	UINT16	A
6000	Alive Register	R/W	1	EMS (Master) writes 1 EVSE (Slave) writes 0 (EVSE checks this register at a period of (Failsafe Timeout)/2 for a value of 1, and sets it to 0. Period cannot go less than 3 seconds)	UINT16	