	EV - Parking and Smart Wallbox EVlink interface specification for “Eletronic Board” Protocol Specification for Modbus exchanges between external system and charging station	Stage Gate	
		OPEN	☐
		SELECT	☐
		DO	☐
		IMPLEMENT	☐
		PRODUCE	☐
		SELL	☒
		CLOSE	☐

Status	Draft ☐	In Review ☐	Official ☒

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2.0	06/11/2015	Charlène Filipe (OPEN)	Update table in §6.1 Add paragraphe §1.1
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2.3	24/03/2017	Charlène Filipe (OPEN)	Update Energy Register §7.2 Remote Start §7.5.3
2.4	03/09/2020	SCHNEIDER	General Review after R7 software release

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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Schneider Electric software or approved software with our hardware products may result in injury, harm, or improper operating results.

Failure to observe this information can result in injury or equipment damage.

Table of contents

1 SAFETY

Hazard categories and special symbols

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention on information that clarifies or simplifies a procedure.

The addition of this symbol to a Danger safety label indicates that an electrical hazard exists, which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential injury hazards. Obey all safety messages that follow to avoid possible injury or death.

⚠ DANGER

DANGER indicates an imminently hazardous situation, which, if not avoided, **will result in** death or serious injury.

⚠WARNING

WARNING indicates a potentially hazardous situation which **could result in** death or serious injury.

⚠CAUTION

CAUTION indicates a potentially hazardous situation which **could result in** minor or moderate injury.

NOTICE

NOTICE indicates practices that do not involve the risk of bodily injury.

Important note

Electrical equipment should be installed, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this documentation.
A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and installations, and has undertaken safety training in order to recognize and avoid the hazards involved.

⚠WARNING

UNINTENDED EQUIPMENT OPERATION

- Only appropriately trained persons who are familiar with and understand the contents of this guide and all other pertinent product documentation are authorized to work on and with this product.
- NEVER work alone.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

2 INTRODUCTION

2.1 Document purpose

The purpose of this document is to enable the integration of EVlink charging stations into third party solutions using Modbus TCP. This document describes the supported use cases and the protocol of exchanges between an external system and charging stations.

The document is designed for third party System Integrators with relevant Modbus and integration capabilities, enabling them to design, program, test and validate the corresponding solutions.

Features and interfaces described correspond to charging station in standalone installations. In case of charging stations linked to an OCPP system (Backend or Schneider Electric EVlink LMS) please contact Schneider Electric for recommendation before performing integration. ModBus might not be the recommended integration way in this last case.

3 PRE-REQUISITE

3.1 Technical

EVlink charging stations are made of one or two Electric Vehicle Supply Equipment Parking boards, which communicate with modbus TCP with external devices in 16 bits.

The Slave ID is 255.

The choice between odd or even and starting or stoping bit are only on modbus serial.

The interface is done using a shared modbus table, with read only registers informing about internal status.

Read/write registers are used to set external settings and commands, which will affect the functional of a given charging station.

The technical functions describe on this document is available on charging station :

- EVlink Parking (Ref EVFxxxx and Ref EVWxxxx)
- EVlink City
- EVlink Smart Wallbox

Warning : In case of AC charging station with two socket outputs, it's not possible to use simultaneously MobBus communication + LMS to the charger

4 TERMINOLOGY

This section contains the terminology that is used throughout this document.

External system Remote system able to pilote the charging station.

Master board : board controlling the shared functions on the charging station (corresponding to the front right socket which has the lowest IP address).

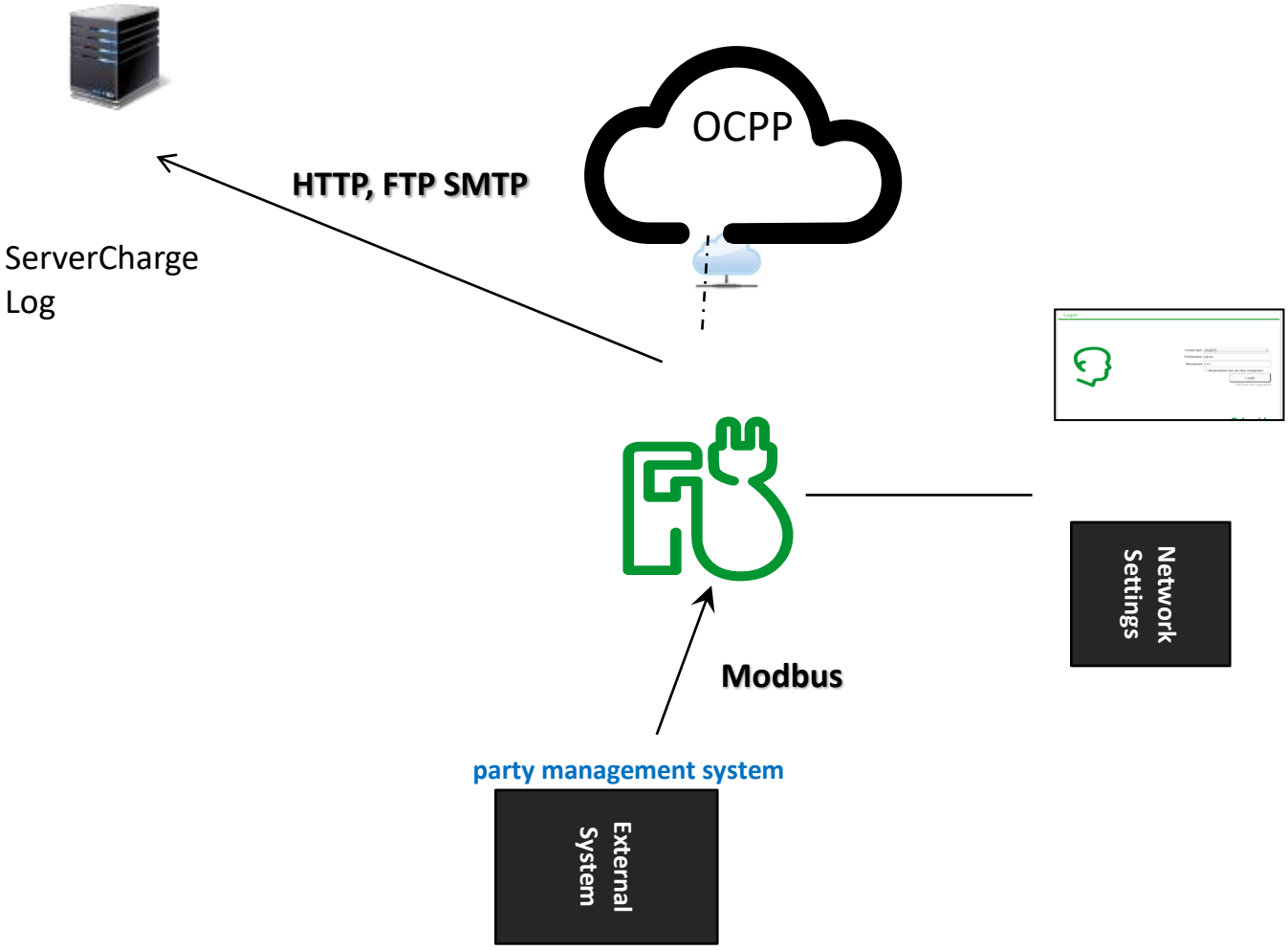
CDR: Charge Detail Records

EVSE : Electric Vehicle Supply Equipment

5 ARCHITECTURES

5.1 Charging Station

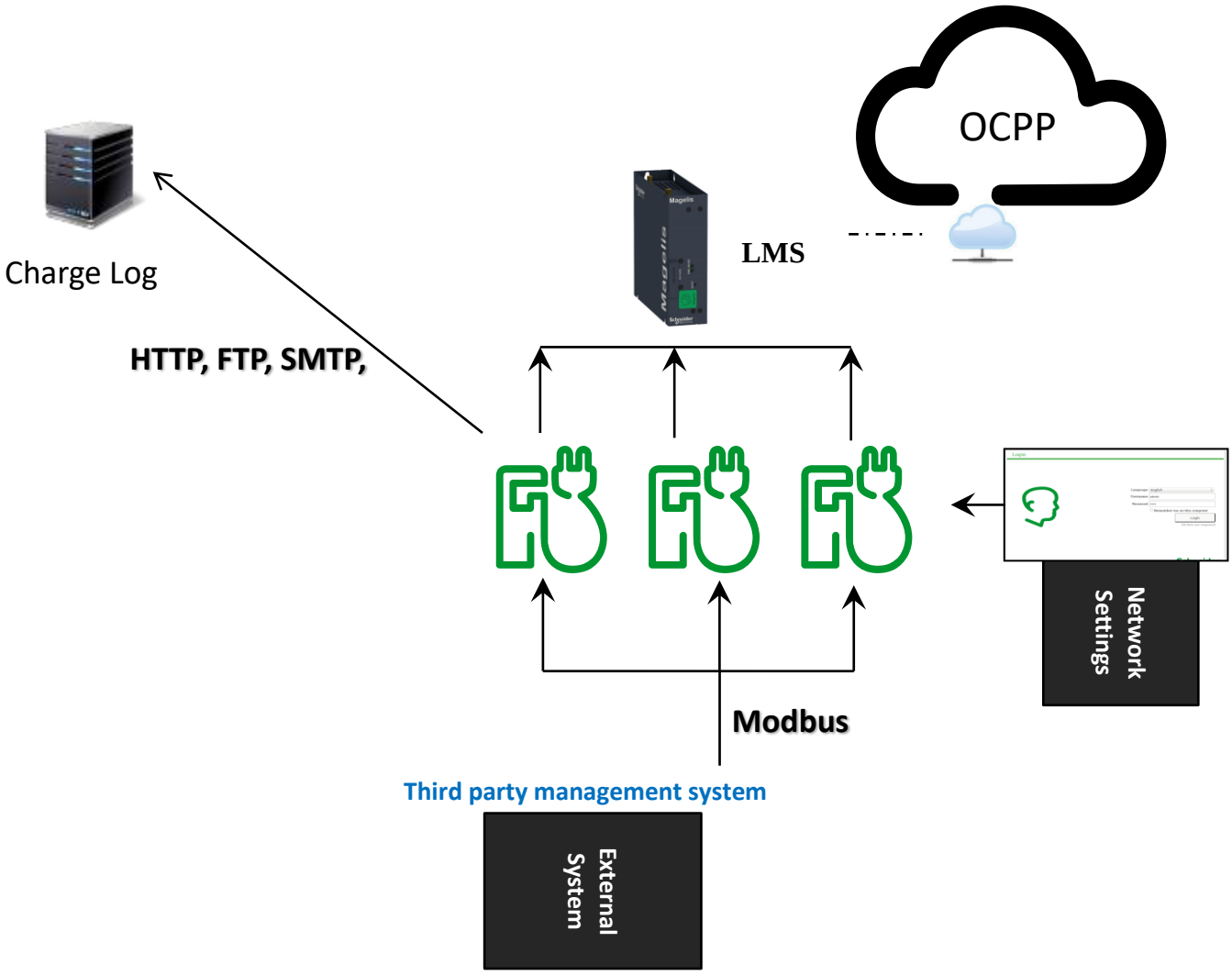
Architecture with a charging station standalone. The ocpp part is optional.



5.2 Charging station Cluster with LMS

Architecture with a cluster configuration. The ocpp part is optional.

In this type of architecture please contact Schneider Electric to evaluate the best integration way. ModBus might not be the best solution and may provide some limitations.



6 FUNCTIONAL OVERVIEW

Following paragraphs describe the functional behavior and the possible interaction between a third party system and a charging station.

This document is applicable for EVlink Parking (EVF…, EVW…), EVlink City (EVC) or EVlink Smart Wallbox (EVB) charging stations with a Software version higher than 2703.

All the part 7 Protocol description is available on the both board (Master and slave board).

6.1 Remote energy management

This functionality allows to manage the load of a charging session. Indeed, external system can update the power given to each sockets or to the charging station via Modbus protocol.

- Remote energy management applies a remote set point to current load, this set point minimizes the load actual set point.
- Remote set point functionality only addresses loads on Mode 3 plugs.
- Nevertheless remote set point = 0 on loads on Mode 2 (TE|TF) plugs is taken into account and leads to suspend it.
- On dual cards station, when activated, load balancing manages automatically socket set point as a function of the current available for the station; the current is allocated to both sockets in order to avoid load shedding as far as possible.
- Any remote set point modification will be taken in account within a 15 sec period.
- An optional lifebit mechanism may be activated to check communication between the external system and the charging station: in case of communication loss, a degraded mode will be applied after 10 seconds on loads on Mode 3 plugs.

6.2 Charging station Status

This function allows an external system to monitor the status of a charging station using Modbus protocol.

The system can see if the charging station is available, in charge or in error. When the charging station is charging, the external system is able to get the state of the charging session according to IEC61851 standard.

6.3 Charging station Commands

An external system is able to take the control of the charging station by sending some commands via Modbus protocol.

It may change charging station availability.

It may stop, suspend or resume a charging session which in progress.

6.4 Event Management

An external system is able to monitor the status of a charging station. The charging station provides some information about its status.

The external system is able to know what is the charging station current status. The charging station can provide also the history of the last 4 events.

6.5 Charge logs management

This function gives to the administrator of the charging station the ability to recover the charge logs of the charging stations he is managing.

The charge Logs are called CDR : Charge Detail Records

When this function is activated, the charging station will automatically send on a regular basis a csv files which contains all the charge logs of the period to an external server.

The content of the csv file is described later in § 7.7.1. It contains most of the information related to a charging session.

The administrator can configure this automatic report with the following options:

- Export Period : daily, weekly, monthly
- Protocol : SMTP (By email), HTTP, FTP

7 PROTOCOL DESCRIPTION

7.1 Lifebit control

A modbus register is shared with the remote system, so that a connection loss can be detected.

The monitor should set the Remote Manager Lifebit register (%MW932) to “1” every second and Electric Vehicle Supply Equipment will reset it (write 0). When the Remote Manager is detected as present, the Remote Manager Status (%MW933) is set to “0” by Electric Vehicle Supply Equipment.

The external system can desactivate the lifebit control by sending “2” to the Remote Manager Lifebit register (%MW932).

On reception of “2” in this register, no more lifebit is expected by Electric Vehicle Supply Equipment and no error “Remote Controller lost” will be raised.

The reception of “1” in this register reactivates the lifebit control mechanism.

By default, the lifebit control mechanism is desactivated (%MW932 is set to “2” by default).

7.1.1 **Loss of communication with the external system**

If the lifebit control mechanism is activated and the Remote Manager Lifebit register is not set to 1 after 10s delay, the remote authentication system is considered lost.

The error “Remote controller lost” (bit 12 of %MW23) is raised and the Manager Status register (%MW933) is set to “1” during connection loss period.

7.2 Energy Registers

The energy registers are available for each socket.

Name	Station power total	StnMeterL1_L2Voltage	StnMeterL2_L3Voltage	StnMeterL3_L1Voltage	StnMeterL1_NVoltage	StnMeterL2_NVoltage	StnMeterL3_NVoltage	Station Intensity Phase X	Station Intensity Phase 2	Station Intensity Phase 3	Station Energy MSB	Station Energy LSB
Meter Type \ Adresse	358	360	362	364	366	368	370	350	352	354	356	357
Unity	kW	V						A			Wh	
Format	float	float						float			uint32_t	

Warning : With the Smart Wallbox, the energy consumed by the electronic board is visible on the register 350 “Station intensity phase 1”. For the energy management, the detection value must be superior to 1A.

The charge time is the time during the session while the contactor is closed (unit:second).

The session time is the time between the start (with a RFID badge or an authorize) and the stop (with RFID badge on the charger or with a command) (unit:second).

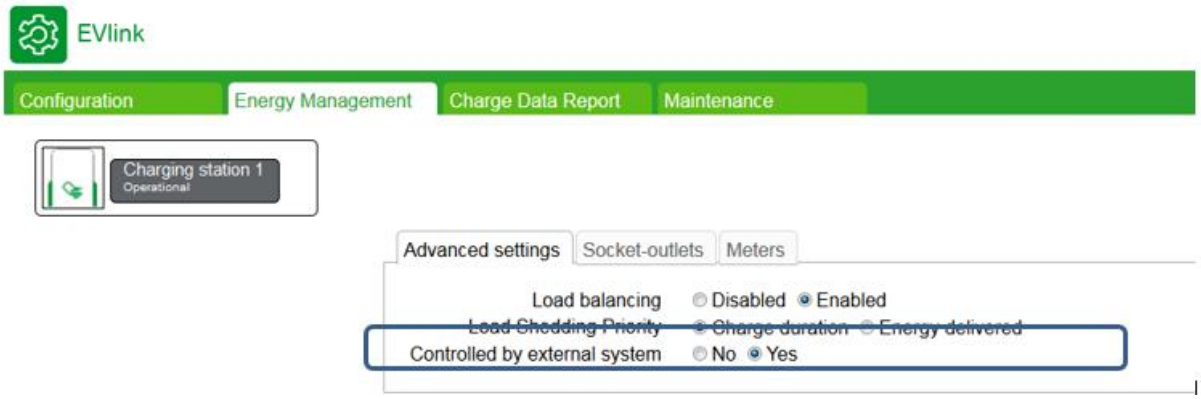
Addr	Register	Type	Size	Access
30	*Charge Time*	Word	1	Read
31	*Charge Time*	word	1	Read
2004	*Session Time*	Word	1	Read
2005	*Session Time*	word	1	Read

7.3 Remote energy Management

7.3.1 **Activation through commissioning tool**

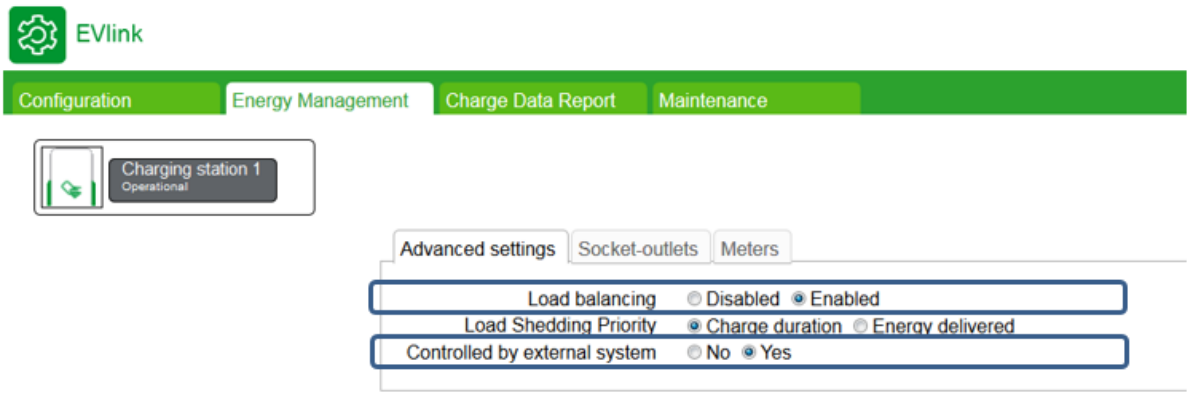
7.3.1.1 Socket remote energy management activation

This option is available by default on EVLink Smart Wallbox and must be activated for EVlink Parking and EVlink City



7.3.1.2 Charging station remote energy management activation

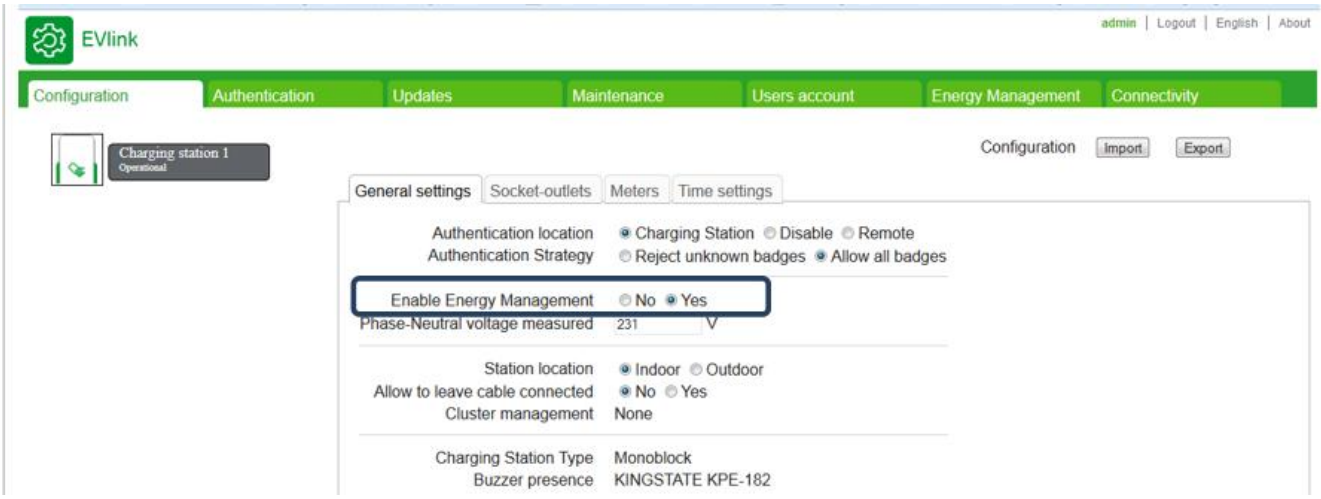
This option is only for EVlink Parking and EVlink City with 2 sockets when Load Balancing is '*Enabled'* and Controlled by External System is '*yes*'.



7.3.1.3 Former firmware versions under 3.0.0.0

Applicable on EVlink Parking and EVlink City, remote energy management activation is allowed only when load balancing is enabled.

Proceed in the following order:



7.3.2 **Activation through OCPP supervision**

Parameter to be used by ChangeConfiguration request to enable remote energy management

Parameter name	Action	Comment
EMsetting	Enable / Disable remote energy management and load balancing	Only on Parking and City; Default = 0 EMsetting = 0 Disable remote energy management EMsetting = 1 Disable remote energy management (load balancing enable) EMsetting = 2 Enable remote energy management EMsetting = 3 Enable remote energy management with load balancing

7.3.3 **Remote energy management Modbus parameters**

Addr	*Register*	Type	Size	Access
301	MaxIntensitySocket*: operable on each board (in Ampère)*	unsigned	1	Read/Write
310	staticMaxIntensityCluster *operable only on master board if load balancing enabled (in Ampère)*	unsigned	1	Read/Write

- On EVlink Parling & EVlink City, if load balancing is activated, update **staticMaxIntensityCluster** to process remote energy management;
- Otherwise, update **MaxIntensitySocket;**
- **MaxIntensitySocket** is maximized by min (Rated charging current, Derated charging current);
    - Rated charging current: maximum current allowed on the socket, not modifiable: 32A or 16A depending on models;
    - Derated charging current: permanent user limitation, modifiable by commissioning tool.
- **staticMaxIntensityCluster** is maximized by min (**IMaxStation**)
    - **IMaxStation**: Rated charging current master board + Rated charging current slave board not modifiable.

7.3.4 **Remote energy management lifebit Modbus parameters**

Addr	*Register*	Type	Size	Access
932	Remote controller life bit: operable only on master board	unsigned	1	Read/Write
933	Degraded mode: operable only on master board	unsigned	1	Read

7.3.4.1 Remote controller lifebit:

- Remote controller must write 1 in this register last least every 10 seconds to activate lifebit
- Remote controller must write 2 in this register to stop lifebit mechanism

7.3.4.2 Degraded mode

- As charging station write 0 in life bit register, degraded mode is activated when this value is not overwritten for more than 10 seconds
- Details on degraded mode are described below

7.3.5 **Remote energy management thresholds**

<table>
<tr><th></th><th>0A</th><th>0A < X < 8A for Mono Phasis Load
0A < X < 14A for Tri Phasis Load</th><th>X > 8A for Mono Phasis Load
X > 14A for Tri Phasis Load</th><th>Degraded Mode</th></tr>
<tr><td>Mode 3</td><td rowspan="2">Suspend the Load</td><td>Suspend the Load</td><td>Apply the Setpoint
Or Restart if load was suspended</td><td>8A for Mono Phasis Load
14A for Tri Phasis Load</td></tr>
<tr><td>TE|TF</td><td colspan="2">Acknowledge the Setpoint without impact on the ongoing load
Or Restart if load was suspended</td><td>No change, nominal load
10A or 14A</td></tr>
</table>

7.4 Charging station Status

Parking board V2 is shipped with factory information written into embedded eeprom memory.

Available information is:

Addr	Register	Type	Size	Access
6	*CPW State*	word	1	Read

CPW1 State:
0 – Electric Vehicle Supply Equipment not available - state F
1 - Electric Vehicle Supply Equipment available - state A
2 - Plug detected - state A+
4 - EV connected – state B
5 - EV connected – state C-

6 - EV connected, ventilation required – state D-
7 - Electric Vehicle Supply Equipment ready - state B+
8 - EV ready - state C
9 - Charging EV - state C+
10 - EV ready, ventilation required - state D
11 - Charging EV, ventilation required - state D+
12 - Stop charging
13 – Alarm
14 - Shortcut – state E
15 - Digital Com by Electric Vehicle Supply Equipment state

7.5 Charging station Commands

An external system can be used to suspend and resume charge if not enough energy is available for the cluster

The "*Remote Command*" register (%MW150) is used to receive commands that affect the functional of each socket outlet of a given charging station.

On reception of a command, the board executes the command and writes the status of the execution in the « *Remote Command Status*" register (%MW20).

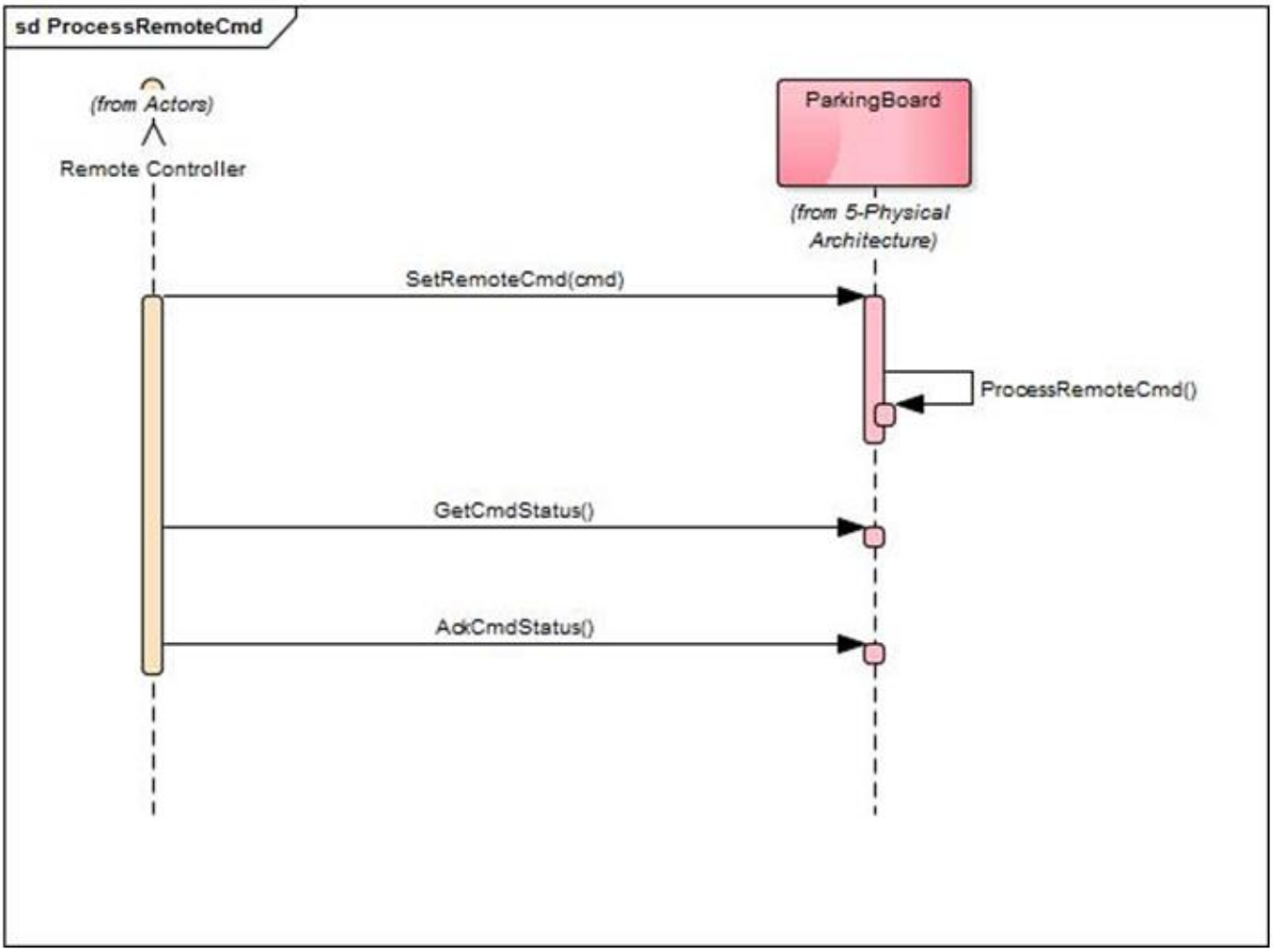
The different possible status are:

- *cmd_number* if the command has been well executed
- 0x8000 | *cmd_number* if an error occurred

Addr	*Register*	Type	Size	Access
20	*Remote Command Status*	Word	1	Read
150	*Remote Command*	word	1	Read/Write

After reading the status of the command, the external system that sent the command should acknowledge the status by resetting (write 0) the "*Remote Command*" register (%MW150).

The exchanges between a remote controller and the ParkingBoard should occur as described in the following diagram:



7.5.1 General operations initiated by the external system

7.5.1.1 SetRemoteCmd

The system is written in the remote command register (%MW150)

7.5.1.2 GetCmdStatus

To check that the authentication information have been taken into account by the charging station the external system reads the remote command status register (%MW20).

- The different possible status are:
    - cmd_number if the command has been well executed

- 0x80xx (0x8000 | cmd_number) if an error occurred
- Another value : In this case, the command status must be read again later.

After reading the command status, the external system should execute *ackCmdStatus.*

7.5.1.3 AckCmdStatus

Reset (write “0”) remote command register (%MW150).

7.5.1.4 Force Stop Charging

Command received from external controller
3- Stop the charge

If this command is received, Electric Vehicle Supply Equipment should stop charging if EV is charging or Unplug cable if no charge is running (but cable still connected).

This is the case if plug is locked and User cannot unplug due to badge loss or charge timeout (EV owner is missing).

7.5.1.5 Remote Start

The remote start is not available. The charge will start automatically if all the conditions are met.

(See §7.1 for more details about the remote start via third Party Authentication)

7.5.1.6 Suspend Charge

Command received from external controller
4- Suspend Charging

The charging session enters stand by mode, until session is stopped, or restart charge command is sent (not restarted if “START” push button is used).

If Electric Vehicle Supply Equipment reboots after this command has been sent, the board should restart with previous saved state (suspended).

7.5.1.7 Restart Charge

Command received from external controller
5- restart charging

Charging is restarted if this command is received. This can be sent by external system of the charging station.

7.5.1.8 Electric Vehicle Supply Equipment unavailable

Command received from external controller
6- Set Electric Vehicle Supply Equipment unavailable

The evse board switchs to unavailable state (if charge not started). If a charge is running, the command is saved and executed after charge ends.

To quit this state, command 34 = Set Electric Vehicle Supply Equipment available should be sent to the board, informing it that circuit breaker state for example has come back to right state.

If Electric Vehicle Supply Equipment reboots after this command has been sent, the board should restart with previous saved state (unavailable).

Once the charging station is set unavailable through this way, error 'Evt #11 - Upstream Protection Devices' will be present in maintenance report and in communication through OCPP.

7.5.1.9 Electric Vehicle Supply Equipment available

Command received from external controller
34- Set Electric Vehicle Supply Equipment available

This command is used to set a socket outlet available (after command "set unavailable" was sent).

7.6 Event management

Error status words are updated each time an internal or communication error occurs (or disappears).

An autotest is run at init, and is executed during runtime in order to detect any kind of error before and during a charge session.

Addr	Register	Type	Size	Access
23	Error Status MSB	word	1	Read
24	Error Status LSB	word	1	Read

Auto detected errors are:

Electric Vehicle Supply Equipment description	Error Status
Lost communication with RFID reader	%MW23 bit 0
Lost communication with display	%MW23 bit 1
Cannot connect to master board	%MW23 bit 2
Incorrect plug lock state	%MW23 bit 3
Incorrect contactor state	%MW23 bit 4
Incorrect surge arrestor state	%MW23 bit 5
Incorrect anti intrusion state	%MW23 bit 6
Cannot connect to US daughter board	%MW23 bit 7
Configuration file missing, corrupted or already open	%MW23 bit 8
Incorrect shutter lock state	%MW23 bit 9
Incorrect circuit breaker state	%MW23 bit 10
Lost communication with powermeter	%MW23 bit 11
remote controller lost	%MW23 bit 12
Incorrect socket state	%MW23 bit 13
Incorrect charging phase number	%MW23 bit 14
Lost communication with cluster manager	%MW23 bit 15
Mode3 communication error (CP error)	%MW24 bit 0
Incorrect cable state (PP error)	%MW24 bit 1
Default EV charging cable disconnection	%MW24 bit 2
Short circuit FP1	%MW24 bit 3
Overcurrent	%MW24 bit 4
No energy available for charging	%MW24 bit 5

In addition, a specific register is used to inform about the reason of the last charge ending. This register is updated each time a charge is ended or rejected (simplified mode 3 not allowed, ventilation not allowed, etc).

Addr	Register	Type	Size	Access
9	LastChargeStatus	word	1	Read

Status of the last charge :
· 0 – circuit breaker enabled (emergency)
· 1 – OK (ended by EV in mode 3)
· 2 - ended by cluster manager loss (lifebit timeout 10s)
· 3 – end of charge in SM3 (low current)
· 4 – communication error (PWM lost)
· 5 – disconnection cable (Electric Vehicle Supply Equipment plug off)
· 6 - disconnection EV (VE plug off)
· 7 – shortcut
· 8 – overload
· 9 – canceled by supervisor (external command)
· 0xA - ventillation not allowed
· 0xB - unexpected contactor open
· 0xC - simplified mode 3 not allowed
· 0xD - power supply internal error(contactor not able to close)
· 0xE - Unexpected plug unlock
· 0xF - default Nb Phases (triphase not allowed)
· 0x45 – DI default Surge arrestor
· 0x46 – DI default Anti Intrusion
· 0x49 – DI default Shutter Unlock
· 0x4A – DI default FLSI (Force Load Shedding Input)
· 0x4B – DI default Emergency Stop
· 0x4C – DI default Undervoltage
· 0x4D – DI default CI (Conditional Input)
· 0xFE – other
· 0xFF – undefined

7.6.1 **Exemple - Register PM**

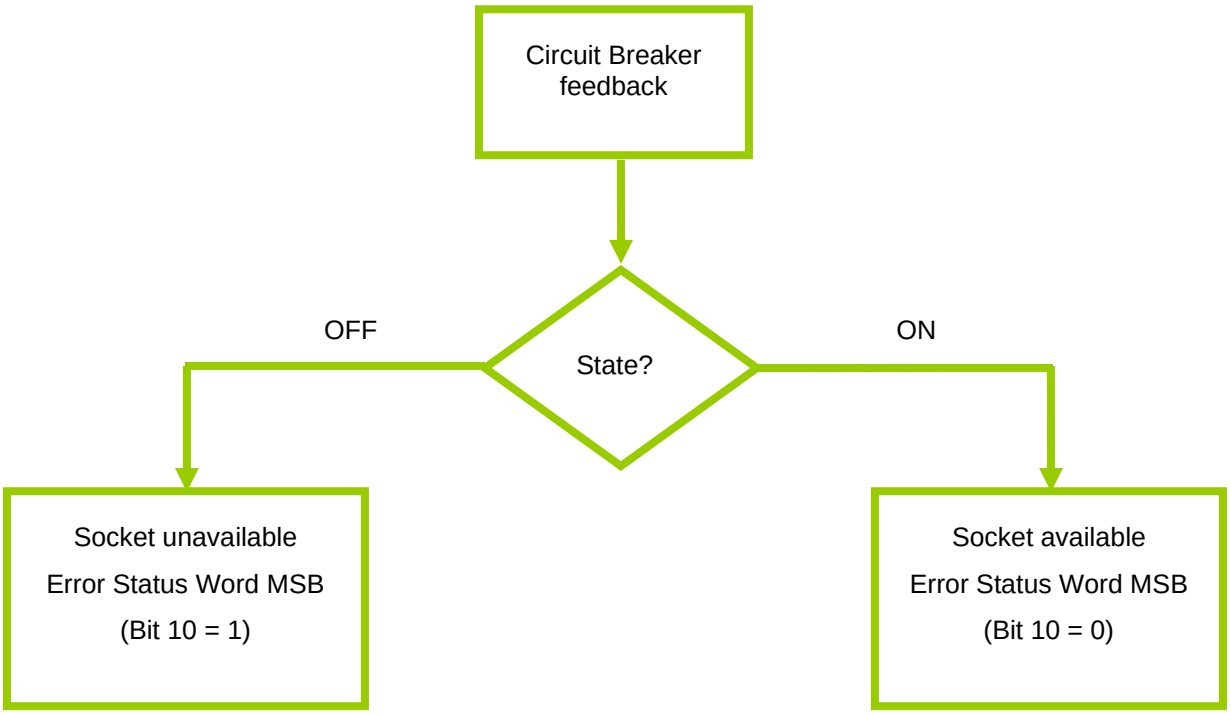
To kown the value of the power meter , the external system must check the register error status MSB. The status of the powermeter is on the register %MW23 bit 11 Lost communication with the powermeter.

If the communication is lost with the powermeter :

Error Status MSB = 0x0800

7.6.2 **Circuit breaker Status**

If the circuit breaker feedback is OFF, the error "Incorrect Circuit breaker state" is lifted (bit 10% MW23).



7.7 Historic Error Management

The last four error status words are saved on 4 registers. The register contains Start date, End date, Plug and error code.

Addr	*Register*	Type	Size	Access
1600	PreviousError0 start time (s)	word	1	Read
1602	PreviousError0 end time (s)	word	1	Read
1604	PreviousError0 code	word	1	Read
1605	Reserved	word	1	Read
1615	PreviousError1 start time (s)	word	1	Read
1617	PreviousError1 end time (s)	word	1	Read
1619	PreviousError1 code	word	1	Read
1620	Reserved	word	1	Read
1630	PreviousError2 start time (s)	word	1	Read
1632	PreviousError2 end time (s)	word	1	Read
1634	PreviousError2 code	word	1	Read
1635	Reserved	word	1	Read
1645	PreviousError3 start time (s)	word	1	Read
1647	PreviousError3 end time (s)	word	1	Read
1649	PreviousError3 code	word	1	Read
1650	Reserved	word	1	Read
1660	PreviousError4 start time (s)	word	1	Read
1662	PreviousError4 end time (s)	word	1	Read
1664	PreviousError4 code	word	1	Read

7.8 CDR

The Charge Log management is a feature for the ranges City and Parking. The

7.8.1 **CDR Structure**

For all the following use cases, the Charge Detail Records (CDR) contain:

- CDR ID,
- The charging station ID,
- The socket outlet ID,
- Transaction ID provided by OCCP (if no OCPP supervision, this field is empty),
- The UID of the authentication system (badge number or 00000000 if there is no badge),
- Type of charge (3 values : DC, AC single-phase, AC three-phase),
- Start of session time (YYYY-MM-DDTHH:MM:SS+hh:mm , ISO8601 format, with local time written and UTC time provided (hh and mm) after the “+” or “-“ separator at the end),
- End of session time (YYYY-MM-DDTHH:MM:SS+hh:mm , ISO8601 format, with local time written and UTC time provided (hh and mm) after the “+” or “-“ separator at the end),
- Energy in Wh,
- Type of socket-outlet (schuko, not shucko),
- Charge duration in minutes (charge with closed contactor),
- Comment.

The field CDR ID have an unique identifier of the CDR station. It is an incremented value starting from 1 attributed to each new CDR, whatever is the socket used on the station.

The charging station ID is an unique identifier of the station. It is the datamatrix value of the charging station.

The socket outlet ID must be 1 or 2 , as defined in the commissioning tool, tab Configuration / Socket outlet.

Transaction ID is provided by OCCP if the charging station is supervised by OCPP.
If there is no OCPP supervision, this field is empty.

The UID of the authentication system is:

- the badge number if existing
- 00000000 if there is no badge authentication

The type of charge is one the 2 following values :

- AC single-phase
- AC three-phase

Start of session time have the format : YYYY-MM-DDTHH:MM:SS+hh:mm , ISO8601 format, with local time (hh and mm) written and UTC time provided after the “+” or “-“ separator at the end.

End of session time have the format : YYYY-MM-DDTHH:MM:SS+hh:mm , ISO8601 format, with local time (hh and mm) written and UTC time provided after the “+” or “-“ separator at the end.

The session time period isn’t disturbed by any problem linked to the time setting.

Energy in Wh is the energy consumed during the charge : integer value rounding with mathematical rules.

Type of socket-outlet must be : schuko, type 1, type 2, type 3, charge rapide AC.

Charge duration in minutes is the duration with closed contactor, integer value rounding with mathematical rules

The field comment allow to give information on error cases regarding the csv files.

7.8.2 **Fréquence**

The F_EXT_ManageAutoReportConf function is able to acquire the value of the parameter “Report frequency” for the automatic sending.
The different values proposed are :

- Every day,
- Every week,
- Every month.
- Disable (that means that the automatic sending of charge logs is disabled)

The default value is Disable. The modification is taken in account immediately.

7.8.3 **Protocol**

The F_EXT_ManageAutoReportConf function must be able to acquire the value of the parameter “Protocol”.

The different values proposed must be :

- SMTP,
- FTP,
- HTTP.

The default value is SMTP. The modification is taken in account immediately.

For the SMTP protocol, the F_EXT_ManageAutoReportConf function is able to acquire :

- The definition of the connection with the SMTP server for sending the mails (URL or IP address must be supported). No default value but this field is mandatory. The modification is taken in account immediately.
- A port to use for the connection with the SMTP server. The default value must be 25 if Authentication required is NO and 587 is Authentication required is YES. The modification is taken in account immediately.
- The possibility to enable or not a request of authentication. Default value is NO. The modification is taken in account immediately.
- A user name and password for the connection with SMTP server if needed in the previous field. No default value but this field is mandatory. During the password entry, the characters is displayed with stars.The modification is taken in account immediately.
- A sender address. No default value, but mandatory field. The modification is taken in account immediately.
- Receiver addresses (the possibility to enter 3 addresses is supported). No default value but this field is mandatory for at least one address. The modification is taken in account immediately.

For the FTP protocol, the F_EXT_ManageAutoReportConf function is able to acquire :

- The definition of the connection with the FTP server for sending the files. No default value but this field is mandatory. The modification is taken in account immediately.
- A port to use for the connection with the FTP server. Default value is 21. The modification is taken in account immediately.
- The possibility to enable or not a request of authentication. Default value is NO. The modification is taken in account immediately.

- A user name and password for the connection with FTP server if needed in the previous field. No default value but this field is mandatory. During the password entry, the characters must be displayed with stars.The modification must be taken in account immediately.
- The possibility to enable or not a passive mode. Default value is NO. The modification must be taken in account immediately.

or the HTTP protocol, the F_EXT_ManageAutoReportConf function is able to acquire :

- The definition of the connection with the HTTP server for sending the files (URL or IP address must be supported). No default value but this field is mandatory. The modification is taken in account immediately.
- A port to use for the connection with the HTTP server. Default value is 80. The modification is taken in account immediately.
- The possibility to enable or not a request of authentication. Default value is NO. The modification is taken in account immediately.
- A user name and password for the connection with HTTP server if needed in the previous field. No default value but this field is mandatory. During the password entry, the characters is displayed with stars. The modification is taken in account immediately.
- A physical path. No default value. This field is mandatory. The modification is taken in account immediately.
- The name of the field. No default value. This field is mandatory. The modification is taken in account immediately.