WM-E Term®

Appendix

Parameter description

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Document specifications

This documentation was made for the usage of the **WM-E TERM®** software and for understanding the configuration parameters of the parametring software and configuration files of the modems.

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1. Parameter description

The following parameters can be found and setup in the configuration file and handled by the WM-E Term configuration program.

Configuration file Parameter Name	WM-E Term Parameter Group	WM-E Term Parameter Name	Default value (recommended factory default values)	Measur. unit / Entry type	Comment	Description for the Customer
eventpush.addr	AMM (IEC) / Transp. Mode	Event push address		Phone nr. Or IP address	Destination IP address or phone number	Add the notification phone number or IP addresss to the Event push address field in international format.
ei_client.user	AMM (IEC) / Transp. Mode	EI client username		username (text, numbers)	EI address username	Define the EI client's username for the connection IP address
ei_client.pass	AMM (IEC) / Transp. Mode	EI client password		password	EI address password	Define the EI client's password for the username of the connection IP address
ei_client.addr	AMM (IEC) / Transp. Mode	IP address		IP address	AMM (EIServer) IP address (ftp client IP)	Here you can define the remote server's IP address where the data will be transmitted through the wireless network
ei_client.auth_mode	AMM (IEC) / Transp. Mode	EI client authentication mode		SELECTION	EI client authentication mode	A remote device can be connected to the modem and readout data - here you can select authentication mode Values: N - no authentication E - EI authetication - you have to define the username / password
ei_client.port	AMM (IEC) / Transp. Mode	Server port	0	Port number	AMM (EIServer) port (ftp client port)	Define the port number of the server IP address
ei_client.deployed	AMM (IEC) / Transp. Mode	Auto register	0	Checkbox to enable/disable	Automatic registration to the address	In case of data push send automatically or not Values: 0 = false, 1 = true
ei_client.interval_fast	AMM (IEC) / Transp. Mode	Poll interval fast (not deployed)	30	seconds	Poll interval fast (not deployed)	Value of Poll interval fast (not deployed)
ei_client.interval_slow	AMM (IEC) / Transp. Mode	Poll-interval slow (deployed)	30	seconds	Poll-interval slow (deployed)	Value of Poll-interval slow (deployed)
ei_client.tcp_keepalive	AMM (IEC)	EI client TCP keep alive	10	minutes	EI client TCP keep alive (in minutes)	Keeps the EI client connection alive for the defined time range
datapush.host	AMM (IEC)	Data push host	ftp://nospt:n37SaA39ZuMNqPhK@172.25.9.1	ftp path/URL with creditentials	FTP server IP address - usage: datapush.host = <protocol>://<user>:<password>@<ip_address>/<directory>	FTP server address and connection parameters - as protocol, IP address as user and password.
datapush.iec_address	AMM (IEC)	Data push IEC address		IP address	Data push IEC address (source meter address)	The Data push (ftp) parameters are here if you wish to use the data push service for the modem (as Data push IEC address as the source meter address and the ftp server IP address (Data Push Host)).
datapush.max_retries	AMM (IEC)	Data push max retries	3	number	Data push max retries	Number of retries of data push operation in case of failure
datapush.timeout	AMM (IEC)	Data push timeout	15000	milliseconds	Data push timeout	Interval of data / FTP push connection wait - it waits until the declared interval whether it was successful or not
datapush.interval	AMM (IEC)	Data push interval	600	seconds	Data push interval	Interval of next data / FTP push connection trying - the data push will be inactive until the interval spent and then it will try again (if Data push max retries was not exceeded)
smp.dlms_on_boot	AMM / DLMS	Start DLMS session during the boot process	0	Checkbox to enable/disable	Start DLMS session during the boot process	You can enable the start DLMS session during the boot process - used for compatibility with the Elster AM100 modems. Values: 0 = false, 1 = true
dlms.host	AMM / DLMS	DLMS host address		IP address	DLMS AMM IP address	You can define the DLMS AMM server's IP Address. This is mainly used for compatibility with the Elster AM100 modems
dlms.port	AMM / DLMS	DLMS server port	0	Port number	DLMS server port	You can define the port of DLMS AMM server. It is used for compatibility with the Elster AM100 modems
dlms.timeout	AMM (IEC)	Max. time in sec. without DLMS communication (timeout)	60	seconds	Max. time in sec. without DLMS communication (timeout)	You can define the max. time interval without DLMS communication (timeout)

dlms.lls_secret	AMM (IEC)	DLMS password		password	DLMS password	Define the DLMS password
loadprofile.strict_dsmr	AMM / DLMS	The visibility of the registers	0	Checkbox to enable/disable	(1-0:1.8.0*255 and 1-0:2.8.0*255) in the profiles Daily E billing values (1-0:99.2.0*255) and Monthly billing values (0-0:98.1.0*255) is controlled by this parameter	You can define the registers to be visible or not Values: 0 = false, 1 = true
dlms.auth_mechanism	AMM / DLMS	List of possible DLMS/COSEM authentication mechanisms	1,5	special syntax	List of possible DLMS/COSEM authentication mechanisms	You can achieve a list of possible DLMS/COSEM authentication mechanisms *** Currently not used
emeter.control_mode	AMM / DLMS	Disconnect relay control	4	number	Disconnect relay control mode (E-meter)	*** Currently not used
conn.apn_name	APN	APN Server name	nbiotshared.prtop	name (text, APN allowed chars.)	APN Server name	APN Server name - ask you mobile operator (of the SIM)
conn.apn_user	APN	APN Username		username (text, numbers)	APN Username	APN Username - if you mobile operator / APN requires
conn.apn_pass	APN	APN Password		password	APN Password	APN Password - if you mobile operator / APN requires
conn.auto_user	APN	Create APN username automatically	0	Checkbox to enable/disable	Create APN username automatically	Values: 0 = off implemented, 1 = not implemented in standard FW *** Currently not used
conn.auto_pass	APN	Create APN password automatically	0	Checkbox to enable/disable	Create APN password automatically	Values: 0 = off implemented, 1 = not implemented in standard FW *** Currently not used
smp.always_on	M2M	GPRS always ON	1	Checkbox to enable/disable	GPRS always ON	Check in the field, if it was empty (it will always be online) Values: 1 = on, 0=off value for triggering only
smp.connect_on_timer	M2M	Connection timer	0	Checkbox to enable/disable	Connection timer	Choose the Connection timer – only if you are not using the GPRS always ON option (when it is disabled) Values: 1 = on, 0=off value
smp.connect_start	M2M	Start GPRS connection	FFFFFFFFFF000000	HH:MM:SS	Start GPRS connection	Schedule of starting the GPRS connection First part "FFFFFFFFFF" = the date Second part "000000" is the HHMMSS time format
smp.connect_interval	M2M	Additional delay-time	0	seconds	Additional delay-time	Additional delay-time interval In case of using "push" to give some delay for build-up the connection
smp.disconnect_delay	M2M	Hold-time of GPRS connection	0	seconds	Hold-time of GPRS connection	Hold-time interval of the GPRS connection (When there is no available GPRS connection, after the defined time (in seconds) will try to reconnect the GPRS connection
tm_server.port	M2M	Port for transparent (IEC) meter-readout	9000	Port number	Port for transparent (IEC) meter-readout	Define the Port for transparent (IEC) meter-readout. Note that must be different from the Download config and firmware port number
fw_server.port	M2M	Port for download config and firmware	9001	Port number	Port for download config and firmware	Define Port for download config and firmware. Note that must be different from Transparent IEC meter-readout port number
conn.max_retries	M2M	Number of GPRS connection attempts till module-reset	15	number	Number of GPRS connection attempts till module-reset	Number of GPRS connection attempts till module-reset
conn.retry_delay_rewind	M2M	Waiting time until next try	1	seconds	Waiting time until next try	*** not implemented
conn.encrypt_pass	M2M	Encrypt password via MD5 algorithm	0	Checkbox to enable/disable	Encrypt password via MD5 algorithm	Encrypt password via MD5 algorithm Values: 0 = false, 1 = true *** not used
conn.retry_delay	M2M	Time(s) [secs] between GPRS connection attempts	15,15,300,15,15,300,15,15,3600	seconds	Time(s) [secs] between GPRS connection attempts	If the PDP context activation was not successfull, it will delay the reconnection according to the listing
conn.ping_host	Watchdog	Ping IP-address	8.8.8.8	IP address	Ping IP-address	IPV4 address to ping (for checking the cellular connection health)
conn.ping_max_retries	Watchdog	Number of ping-retries	3	number	Number of retries of checking the cellular network availability	Number of retries of checking the cellular network availability
conn.ping_timeout	Watchdog	Ping wait-time (for reply)	15000	milliseconds	Ping wait-time (for reply)	Define the wait time for reply the ping (checking the cellular network availability)
conn.ping_interval	Watchdog	Wait-time (for next)	300	seconds	Wait-time (for next ping)	Define the wait time between ping cycles, time interval until the next ping sequence (checking the cellular network availability)
conn.no_network_timeout	Watchdog	Timeout at GPRS login fail	30	minutes	Timeout at GPRS login fail	Timeout when GPRS login fail accours - tolerance value
smp.bos_timeout	Watchdog	Wait-time till module-reset	24	hours	Wait-time till module-reset	Wait-time till module-reset

smp.restart_time	Watchdog	Daily restart on a fix, parametrised time, HHMM		HH:MM	Daily restart on a fix, parametrised time, HHMM	Daily restart on a fix, parametrised time, value in HHMM format. If you attempt to define a daily restart interval for the device - add the HHMM value of the time of the device restart. Leave it empty if you do not allow the device to restart every day.
conn.reconnect_interval	Watchdog	Seconds, gprs connection closed and restored after this time	0	seconds	GPRS connection closed and restored after this time (in seconds)	If the ping is configured, and there can be define the interval / repeat time of ping tries. If the ping is configured, and there can be define the interval / repeat time of ping tries. Recommended values 900, 7200
conn.dss_apn_name	Watchdog	APN server name for device services session		name (text, APN allowed chars.)	APN server name for device services session	Telit module FOTA support APN Server name - ask you mobile operator (of the SIM)
conn.dss_apn_user	Watchdog	APN user name for device services session		username (text, numbers)	APN user name for device services session	Telit module FOTA support APN Username - if you mobile operator / APN requires
conn.dss_apn_pass	Watchdog	APN password for device services session		password	APN password for device services session	Telit module FOTA support APN Password - if you mobile operator / APN requires
conn.dss_ws46	Watchdog	Cellular network access technology selection (LTE, 3G, 2G mode) for FOTA	28	SELECTION	Cellular network access technology selection (LTE, 3G, 2G mode) for FOTA	Telit module FOTA support Here you can select a dedicated network for FOTA firmware updates or in case of availability of fallback channel you can choose that, or there is the opportunity to choose "All available access technology" Values: "2G only" - Value: 12 "3G only" - Value: 22 "All available access technology (Default)" - Value: 25 "LTE only (default on LTE Cat 1. modems)" - Value: 28 "3G to 2G (Fallback)" - Value: 29 "LTE to 2G (Fallback)" - Value: 30 "LTE to 3G (Fallback)" - Value: 31
conn.dss_ftpota_retry	Watchdog	FTP OTA retry	0	number	FTP Firmware refresj (OTA) retry	Telit module FOTA support FTP firmware refresh retry numbers
conn.dss_ftpota_par	Watchdog	FTP OTA parameter (Server address, filename, path)		ftp path/URL with creditentials	FTP OTA parameter (Server address, filename, path) Like: FTP server IP address - usage: datapush.host = <protocol>://<user>:<password>@<ip_address>/<directory>	Telit module FOTA support FTP server address and connection parameters - as protocol, IP address as user and password. Leave it empty if it is not used
conn.dss_ftpota_status	Watchdog	FTP OTA status		READ ONLY	FTP OTA status	Telit module FOTA support Status information of the current FTP OTA status
conn.at_wmbs	Mobile Network	Band frequency configuration	28	list code	Band frequency configuration according to the selected cellular network access technology	WMBS tab: 2G, 3G, LTE, … access technology selection Here you can select a dedicated network or in case of availability of fallback channel you can choose that, or there is the opportunity to choose "All available access technology" Values: "2G only" - Value: 12 "3G only" - Value: 22 "All available access technology (Default)" - Value: 25 "LTE only (default on LTE Cat 1. modems)" - Value: 28 "3G to 2G (Fallback)" - Value: 29 "LTE to 2G (Fallback)" - Value: 30 "LTE to 3G (Fallback)" - Value: 31
conn.cicb	Mobile Network	Type of incoming calls when no incoming bearer is specified	0	SELECTION	Type of incoming calls when no incoming bearer is specified	CICB tab.. Values: 0 = voice, 2 = fax, 4 = data
conn.rings	Mobile Network	Number of ring before accept call	3	number	Delay of accepting call (rings)	Waits for the defined number of rings before accepting the data call (CSD)
csd.password	Mobile Network	Password for CSD call		password	Password for CSD call	Password for CSD call
sim.pin_code	Mobile Network	PIN number (SIM card)		PIN code	PIN number (SIM card)	PIN code of the SIM card - ask your mobile provider
conn.at_cops	Mobile Network	Provider selection-mode (roaming)	4,2,26803	special syntax	Provider selection-mode (roaming)	Syntax in file: mode, format, operator
calendar.dst_begin	Calendar	Start daylight saving	FFFF03FE07020000003C	DateTime	Start daylight saving (summer)	Start date of daylight saving (summer) in hexadecimal format
calendar.dst_end	Calendar	End daylight saving (winter)	FFFF0AFE070300000078	DateTime	End daylight saving (winter)	End date of daylight saving (summer) in hecadecimal format
calendar.dst_enabled	Calendar	Switching daylight saving time / normal time	1	Checkbox to enable/disable	Switching daylight saving time / normal time	You can switch on or off the daylight saving time / normal time handle Values: 0 = false, 1 = true

calendar.dst_deviation	Calendar	Offset daylight-saving-time in minutes	60	minutes	Offset daylight-saving-time in minutes	GMT offset of daylight saving time handle (in minutes)
calendar.timezone	Calendar	Deviation of local time to GMT	60	minutes	Deviation of local time to GMT	GMT deviation of daylight saving time handle (in minutes)
led1	Standard meter interface	Meaning of LED 1	1	SELECTION	Meaning of LED 1	LED tab - selecting the nr. Of LED meaning in the LED selection list
led2	Standard meter interface	Meaning of LED 2	6	SELECTION	Meaning of LED 2	LED tab - selecting the nr. Of LED meaning in the LED selection list
led3	Standard meter interface	Meaning of LED 3	4	SELECTION	Meaning of LED 3	LED tab - selecting the nr. Of LED meaning in the LED selection list
led4	Standard meter interface	Meaning of LED 4	0	SELECTION	Meaning of LED 4	LED tab - selecting the nr. Of LED meaning in the LED selection list
led5	Standard meter interface	Meaning of LED 5	30	SELECTION	Meaning of LED 5	LED tab - selecting the nr. Of LED meaning in the LED selection list
led6	Standard meter interface	Meaning of LED 6	2	SELECTION	Meaning of LED 6	LED tab - selecting the nr. Of LED meaning in the LED selection list
emeter.date_format	Standard meter interface	Date format for read out	YYMMDD	Date	Date format for read out (YYMMDD)	Date format / syntax for read out (YYMMDD)
smp.firmware_version	Standard meter interface	Firmware version	V2.3.9	READ ONLY	Firmware version	version, ID and status information
smp.os_version	*Device information*	Operating system version	ME910C1-E1 30.00.201-B018 RSSI=-65 NET=26803,9 IP=198.19.133.200	READ ONLY	Operating system version	Operating system revision information
smp.revision_id	*Device information*	Operating system revision and ID	WM-E3S B1.05	READ ONLY	Operating system revision and ID	Operating system revision and ID
smp.modem_sn	*Device information*	Serial No. Of the modem chip	9044270119000010	READ ONLY	Serial No. Of the modem chip	Serial No. Of the modem chip
smp.modem_imei	*Device information*	IMEI of the modem	356345080030694, ICC = 8935103196400006897	READ ONLY	IMEI of the modem	SIM ICC and PDP IP address information
smp.nta_mode	Transp./ NTA	Multi utility mode (DLMS active)	1	SELECTION	Multi utility mode (DLMS active)	Values: 1= transparent mode, 2 = multi-utility mode *** Transparent mode implemented only
tm.mode8n1	Transp./ NTA	Data format fix 8N1 for meters, that fix on 8N1	0	Checkbox to enable/disable	Data format fix 8N1 for meters, that fix on 8N1	Values: 1=on, 0=off
tm2.port	Secondary transparent	Secondary transparent port	9002	Port number	Secondary transparent port	Secondary transparent port number
tm2.baud	Secondary transparent	Secondary transparent baudrate	2418	Baudrate (bps)	Secondary transparent baudrate	Secondary transparent baudrate (speed rate in bps)

2. Push mode

2.1 The definition of "Push" method

The modem isn't always registered to GPRS network, the connection initiated by external events as:

- SMS from data center

- change of meter status register

- preprogrammed intervals

2.2 Passive FTP upload

Configuration in DMSet:

- GPRS always ON : unchecked
- ping IP-address host : host, user, password: ftp://username:password@host/path
- use IRA character set

Configuration File:

- smp.always_on = 0
- conn.ping_host = ftp://username:password@host/path
- smp.connect_interval = 28800
- smp.connect_start = YYYYMMDDWWHHmmSS wildcard=FF
- csd.password = <max. 16 characters>
- apn name: 50 char
- apn user, pass : 30 char
- if the ftp port is different from nr. 21, eg. 1021, please use the following syntax: ftp://username:password@host:1021/path
- maximum size of data block for IEC /?! readout is 16kbytes.
- Filename is generated from meter serial number, date, time, and a incremented counter

  File name convention example:

  filename: SN<meter_serial_number>_YYYYMMDD_hhmmss_<4-digit_counter>.TXT

  SN12345678_YYYYMMDD_hhmmss_0001.TXT

  Trigger 1: status register change, new event

  Trigger 2: timed

- smp.connect_interval in seconds, def 28800 max 0xFFFFFFFF
- counted in NV-ram, cleared if NV invalid or setting changed

OR

- synchronised smp.connect_start
- Connect start time format: YYYYMMDDWWHHmmSS

Where: Y = Years, M = Months, D = Days

W = Day of week, where 01 is Monday and 07 Sunday.

H = Hours, m = Minutes, S = Seconds

- Wildcards FF are allowed, Numbers are hex formatted

Trigger 3: SMS using csd.password, IRA character set (ITU T.50)

or a subset of this defined by DMSet.

pw=<csd.password>.cmd=/?!

SMS message is checked for valid password.

if no password: pw=.cmd=/?!

The cmd will be executed, and the result will be uploaded to the ftp server.

There is no positive or negative acknowledgement for the execution of the SMS.

Note that the DMSet SW is not intended to send the SMS.

2.3 Data encryption

If AES128 encryption is selected and encryption key is set, the data written to the file are encoded by AES algorithm in data blocks eg. 64 bytes.

The data is padded with zeroes at the end before encoding.