



whatwatt

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Release Notes whatwatt Go firmware Version 2.8.2

Please only install firmware 2.8.2 on compatible HW.

Your HW is **compatible**, if the address on the product label is as follows:

whatwatt AG
L'Orgère 12, 1568 Portalban, Switzerland

Please **do not install** this firmware on engineering samples HW: **ww-go-01.Rev.004**

Version	Type	Description
2.8.2	Bugfix	Correct autodetection of Landys+Gyr E360
2.8.1	Feature	Strip white characters from MQTT topic value
2.8.0	Bugfix	Correct memory management issues related to BT and DLMS tree management
2.8.0	Feature	Support extended GBT length in DLMS parses
2.8.0	Feature	Support 'head' interface type in WebUI for IR-based meter connections
2.8.0	Feature	Better warnings before critical actions are started (e.g. WIFI settings reset)
2.8.0	Feature	Explained how to configure custom scalers as exponents
2.7.1	Feature	Push list for Siemens IM350 added
2.7.0	Feature	Additional variables available for Modbus templates
2.7.0	Bugfix	Deep interface autoconfiguration fails for Kamstrup Omnipower
2.7.0	Feature	UART RX Diagnostics in /api/v1/system API response
2.7.0	Bugfix	Code 42.0.0 mapping missing in DSMR

Version	Type	Description
2.7.0	Feature	Handle extended registers as registers when format is incorrect
2.7.0	Feature	Handle missing meter_id for volume meters
2.6.1	Feature	Control deep interface autoconfiguration with settings flag
2.6.1	Bugfix	Siemens meter handling correction
2.6.1	Feature	Increase returned BSSIDs in BT mode to 32
2.6.1	Feature	Experimental deep interface autoconfiguration
2.6.1	Feature	Push list fixed configs for various meters and energy providers
2.6.1	Feature	Optical IR-head autodiscovery
2.6.1	Feature	Active power calculation from angles
2.6.0	Feature	Experimental support for Wireless M-Bus and improvements in optical readouts with prototype hardware modules
2.5.2	Feature	Troubleshooting tools for missing critical CII payload headers
2.5.1	Bugfix	Kaifa meter ID missing
2.5.1	Feature	Experimental support for optical communication with some meters
2.4.1	Bugfix	Report buffer in RAM failing for local disconnections
2.4.0	Feature	Modbus TCP template management (export, import, reset to default) to support Modbus Meter Emulations
2.4.0	Feature	New WebUI with more comprehensive overview
2.0.2	Feature	Improve cloud communication when communication with meter is impossible
2.0.2	Feature	Modbus registers with constant value type
2.0.2	Feature	Delay boot if P1 interface is used
2.0.2	Feature	Report buffer in RAM for brief cloud connectivity interruptions
2.0.2	Feature	NTP server selection enhancements (DHCP option 42, custom servers)
2.0.2	Feature	Extreme power saving mode
2.0.2	Feature	Unify wording for locally controlled Services (used to be called Integrations)
2.0.2	Feature	Improve LAN netmask validation in local WebUI
2.0.2	Feature	Update the copyright note in the footer
2.0.2	Bugfix	Correct too aggressive Enter key handling in Payload and Berry editors
2.0.2	Feature	Implement complete LAN netmask handling
2.0.2	Bugfix	Correct handling of 15 characters LAN IP addresses (e.g.: 192.168.234.100)

Version	Type	Description
2.0.2	Feature	Experimental support for GGC protocol variant (Sagemcom)
2.0.1	Feature	Measurement backups for MQTT clients stored on SD cards
2.0.1	Feature	Improved variable expansion for MQTT and Berry scripts
2.0.1	Feature	Minor updates in local WebUI
2.0.0	Feature	Abstraction layer for hardware versioning
2.0.0	Feature	Prevent going to the power saving mode if Ethernet connection is used
2.0.0	Feature	Digest authentication
2.0.0	Feature	Support custom Kamstrup meter addressing schemes
2.0.0	Feature	Larger response buffer for longer API response messages
2.0.0	Feature	Scheduled debugging improvements
2.0.0	Feature	Report water codes in /api/v1/report and via variables, if aggregated by electric meter
2.0.0	Feature	Local WebUI: Interactive MQTT Payload Template Editor under MQTT, with auto-preview, template loading and publication, variable name completion and JSON syntax validation
2.0.0	Feature	Local WebUI: Better Berry editor, if Berry Script is enabled under Integrations
2.0.0	Feature	Local WebUI: Convenient SD Card browser, if SD Card CSV exports are enabled under Integrations
2.0.0	Feature	Local WebUI: Usability improvements when navigating to subpages and opening files
2.0.0	Feature	Local WebUI: Show license details on the main page
2.0.0	Feature	Local WebUI: More useful tab titles
2.0.0	Feature	Local WebUI: Device information in footer of every page
2.0.0	Feature	Preserve power by limiting WIFI power mode when P1 interface used with p1_wifi_boost in the settings local API
2.0.0	Bugfix	Removed obsolete html pages, redirect to application resources
2.0.0	Bugfix	Fix for Berry console output not showing
1.9.4	Bugfix	Improve reliability of report backups stored on SD cards
1.9.3	Feature	Full support for licenses
1.9.2	Bugfix	Handle HTTPS remote downloads
1.9.1	Bugfix	Handle Mbus packet in HDLC streams
1.9.0	Feature	Improvement in local firmware upgrade handling
1.8.2	Feature	MQTT Payload Testing feature
1.8.2	Feature	Allow stromkonto OTA management

Version	Type	Description
1.8.2	Feature	Support NES 5 time encoding
1.8.2	Feature	Support Scalers also in DSRM mode
1.8.2	Bugfix	Fix expansion of 0-length strings
1.8.1	Feature	Added variables for local and UTC time
1.8.0	Bugfix	Stability improvements (fewer unexpected reboots)
1.7.7	Bugfix	Relaxed validation rules in MQTT TLS-related fields in local WebUI
1.7.6	Bugfix	Fix TLS connectivity with mosquitto MQTT broker
1.7.5	Feature	Add extra OBIS codes 5.8.0, 6.8.0, 7.8.0, 8.8.0 in DSMR mode
1.7.4	Feature	Improved reliability of Berry report delivery
1.7.3	Bugfix	Correct myStrom service status exposed in /api/v1/system
1.7.3	Feature	Increase Connection Pool size
1.7.3	Feature	Improve HTTPD Connection management
1.7.3	Feature	Relaxed dependencies between some services (e.g.: myStrom and Stromkonto)
1.7.3	Feature	Improved diagnostic state reporting (e.g.: Berry status and system resources)
1.7.3	Feature	More direct LED behavior when services other than whatwatt are enabled
1.7.2	Feature	Upgrade process improvements
1.7.2	Feature	Updated WebUI with network-related improvements (e.g.: always show ETH MAC, explain WIFI status, etc.)
1.7.1	Feature	Support TLS 1.3 for even better communication security
1.7.1	Bugfix	Correct NO_DATA state indication when meter is disconnected and reconnected too rapidly
1.7.1	Feature	New IF type ttl_push for Kamstrup PUSH mode enabling
1.7.0	Feature	Support for berry scripting language to even better control locally executed actions
1.6.5	Feature	High performance (CPU clock, WIFI power) when P1 adapter is used
1.6.4	Feature	Kamstrup Omnipower DLMS push improvements when clock issues occur
1.6.3	Bugfix	L+G 570 meter not recognized bug fix
1.6.2	Feature	Workaround for key-role mismatch (Kamstrup Omnipower)
1.6.1	Feature	Improvements in local actions implementation
1.6.0	Bugfix	L+G meter not recognized bug fix
1.5.4	Feature	SET endpoint for /api/v1/settings

Version	Type	Description
1.5.3	Feature	Support for Siemens TD-35XX
1.5.2	Bugfix	DST handling for Omnipower meters (first attempted in 1.5.1)
1.5.0	Feature	Added /api/v1/settings API
1.4.9	Feature	Kamstrump Omnipower time shift handling added
1.4.8	Feature	Better exposure of stromkonto service status in local WebUI
1.4.7	Bugfix	Fix missing /meter/objects in some cases
1.4.6	Bugfix	Improved robustness of NES meters using MEP protocol
1.4.5	Bugfix	Unstable handling of NES meters improved
1.4.4	Feature	Workaround for NES meter communication issue
1.4.3	Feature	Show instructions when enabling protection in local WebUI
1.4.3	Feature	Allow defining WIFI networks with custom or hidden SSID
1.4.3	Bugfix	Additional "0" character on top of system page when trying to backspace empty password
1.4.3	Feature	Minor updates in local WebUI
1.4.2	Feature	WebUI: Support for setting custom certificates and keys for MQTT clients
1.4.2	Feature	WebUI: Added fractional scaling settings for more precise control
1.4.2	Feature	WebUI: New configuration option for compatibility with P1 adapters
1.4.2	Bugfix	Resolved an issue where connecting to the WebUI via DNS hostname was failing due to problems with the DNS resolution and the CORS protection mechanism
1.4.2	Bugfix	Fixed an incorrect meter status displayed in WebUI—previously, if a meter stopped sending data, the status incorrectly showed as "OK". Now correctly shows "NO DATA" when data transmission ceases.
1.4.2	Bugfix	Addressed a problem where meters reporting more frequently than every 5 seconds experienced an incorrect report interval after disconnecting and reconnecting the cable. The system now correctly enforces the minimum 5-second interval.
1.4.1	Bugfix	CORS and DNS /hostname fixes. After this release is installed, and the hostname is invalid, it will be restored to the default. Changing the hostname requires the device to be rebooted
1.4.0	Feature	Second production Release. 1.3.1 and 1.4.0 are identical.
1.3.1	Feature	DST handling based on NTP time when time provided by the meter is not really UTC
1.3.1	Bugfix	Allow /firmware virtual path to be refreshed in the browser
1.3.1	Bugfix	Resolve a race condition on /live view

Version	Type	Description
1.3.0	Feature	Repackaged 1.2.22 in preparation of the release
1.2.22	Bugfix	Fixed issue with plug detection
1.2.22	Feature	Showing dot masks in fields where password is set
1.2.22	Bugfix	Fix for rounding values shown in local WebUI
1.2.22	Feature	P1_ADAPTER mode added to APIs to control mode
1.2.21	Bugfix	Fixed issue with incorrectly reported KEY REQUIRED meter status
1.2.21	Feature	Improvements in DSMR parsers
1.2.20	Feature	Manage MODBUS in local WebUI
1.2.20	Feature	Support for floating point scaling settings for every OBIS code
1.2.20	Feature	Support for custom certificates and keys for MQTT client configuration
1.2.20	Feature	Improved handling of situations where the device used to shut down after USB-C power disconnection
1.2.20	Feature	MQTT reports continually sent even if meter is disconnected
1.2.20	Feature	For credential fields, added <fieldname>_len read-only attribute indicating how long the write-only field <fieldname> is
1.2.20	Feature	Additional meter API fields with the indication if encryption is active (enc_en) and if the authorization is enabled (auth_en)
1.2.20	Feature	Full support for deleting files and directories directly from the SD card, with an updated sd.html management page
1.2.20	Feature	A new neskey.html page, providing quick and easy conversion of the MEP BASIC KEY from text to hexadecimal format
1.2.20	Feature	Updated default Modbus register map now based on Siemens PAC2200 meter
1.2.19	Feature	Initial support for floating point scaling setting
1.2.18	Feature	Modbus TCP Slave Implementation; look for details in a dedicated how-to document
1.2.18	Feature	mDNS presence advertisement
1.2.16	Feature	Upon connecting to the MQTT broker, the meter state is submitted
1.2.16	Feature	Signed current variables
1.2.16	Feature	MQTT username is now optional
1.2.15	Feature	Integration of WebUI with custom scaling factors
1.2.15	Feature	Support for defining and execution of HTTP actions both locally and remotely
1.2.15	Bugfix	Resolved caching issues in local HTTP server
1.2.14	Feature	Improved handling of key requirements messages for NES meters

Version	Type	Description
1.2.14	Feature	Display of current values in the main meter API even when power data for individual phases is unavailable
1.2.14	Bugfix	HTTP client authentication and redirection corrections
1.2.14	Feature	Enhancements in device DNS name resolution and CORS policy handling
1.2.13	Feature	whatwatt-xxxxxx.local access in the browser, with xxxxxx being the last 6 characters of the WIFI MAC/ID. The WebUI will be accessible via http://custom-hostname, http://custom-hostname.local and http://whatwatt-xxxxxx.local. The access via the IP address will continue to work as always: http://<local IP address>
1.2.12	Bugfix	Fix to AP mode not working
1.2.12	Feature	Prevent firmware upgrade to incompatible version when attempted on old hardware
1.2.11	Feature	Ability to set scalers for individual OBIs codes
1.2.10	Feature	Support conversion factor from 0.001 to 1000
1.2.9	Feature	Improvements in handling of E570 unexpected messages
1.2.8	Feature	Improved voltage scalers for L&G E360
1.2.8	Bugfix	Return reactive power for individual phases in reports when DSMR is used
1.2.8	Feature	Adjust reporting time depending on the type of power supply; 5 seconds by default and 15 seconds for Mbus
1.2.7	Feature	Support for fragmented incoming messages from whatwatt cloud
1.2.7	Bugfix	Don't delete whatwatt cloud report sending configuration after reconnection
1.2.7	Feature	Ability to force protocol in /api/v1/meter/settings, especially useful for Kamstrup and DLMS push meters
1.2.7	Feature	New if_mode in /api/v1/meter/settings to force interface type
1.2.7	Bugfix	Fixed issue with scalers and meters that send scalers in reports
1.2.7	Feature	Send COSEM structure in /api/v1/report/objects
1.2.7	Feature	Report hardware version as 1.2
1.2.7	Feature	New WebUI with tariff presentation in live view and control of meter type and scaler set
1.2.7	Feature	Return registration status flags in /api/v1/system (cloud.whatwatt.registered)
1.2.6	Bugfix	Fixed incorrect detection of DSMR/DLSM on P1 port
1.2.5	Bugfix	Fixed a memory leak when custom topics are set from the whatwatt cloud
1.2.5	Bugfix	Fixed handling of COSEM octet-string with zero length

Version	Type	Description
1.2.5	Feature	Advanced energy saving involving CPU frequency control, thread pausing, CPU pausing, especially useful for Mbus meters
1.2.5	Feature	Predefined scalers for L&G E570 meters
1.2.5	Feature	Support for P1 interface without power with an additional adapter
1.2.3	Feature	Updated WebUI version
1.2.3	Feature	Support for custom topic and template-based topic and payload in MQTT configuration
1.2.3	Feature	Regular report times aligned to a full multiple of the reporting time (e.g.: for 15 seconds reporting time, reports will come at 00, 15, 30, 45 seconds after a full minute).
1.2.1	Feature	Enhanced the WebUI with new layout and service labeling
1.2.1	Bugfix	Corrected some issues in DSMR processing
1.2.1	Feature	Possibility to use NTP time as report time (instead of meter time)
1.2.0	Feature	Initial Production Release

whatwatt related documents can be downloaded from whatwatt.ch/docs