



LoRaWAN Generic Node

SKU: GENLWE01

Version: 1.0.0



LoRaWAN Payload Commands (Payload Format)

LoRaWAN commands can be daisy chained into the payload up to the defined maximum payload size of 51 bytes. This mean that for all commands sent to defined number of bytes in the payload is required to avoid misinterpretation of command and/or command values in the receiver side. **All uplink and downlink commands use FPort=10.**

- **Uplink Command Hardware Version Report: 0x03 - HW - CAP_MSB CAP_LSB (4 Byte):** This command reports the hardware version and a bitmap of the capabilities of the device. It is sent unsolicited as the first command during boot-up and as replying command to downlink command *Hardware Version Get*. HW is a single byte indicating the version of the hardware. The bitmap indicates the different capabilities of the device.
- **Uplink Command Configuration Report: 0x04 - IDX - VAL_MSB - VAL_LSB (4 Byte):** This command reports a configuration parameter of the device: IDX is the number of the configuration parameter. The 16 Bit VAL is the parameter itself. Configuration parameters are always 16 Bit values. The table below describes the configuration parameters and their values.



- **Uplink Command Sensor Report: 0x06 - ID - VAL_MSB - VAL_LSB (4 Byte):** This command reports sensor values. The ID indicates the sensor type and defines the format of the 16-Bit VAL. The sensor types of this devices are listed below.
- **Uplink Command Firmware Version Report: 0x0a - VER_MSB VER_2 VER_3 VER_LSB (5 Byte):** This command reports the 32-bit value of the current firmware. It is sent unsolicited as the first command during boot-up and as replying command to downlink command 'Hardware Version Get'.
- **Uplink Command Battery Report: 0x12 - VOLT - BAT_MSB - BAT_LSB (4 Byte):** This command reports the status of the battery. VOLT is the measured voltage of the battery in 100 mV steps, the BAT value is the consumption of the current battery - as counted inside the system - in mAh.

- **Downlink Command Hardware Version Get: 0x03 - (1 Byte):** This command calls for a Hardware Version Report sent upstream
- **Downlink Command Configuration Set: 0x04 - IDX - VAL_MSB - VAL_LSB (4 Byte):** This command allows setting configuration parameters of the device: IDX is the number of the configuration parameter. The 16 Bit VAL is the parameter itself. Configuration parameters are always 16 Bit Values. The table below describes the configuration parameters and its values.
- **Downlink Command I/O Control: 0x05 - PIN - VAL (4 Byte):** This command sets the output value of the Generic Pins. PIN may be 1 = SDA, 2 SCL, or 3 = ADC, the VAL will be either 1 or zero. Please make sure that the output controlled is in output mode.
- **Downlink Command Sensor Get: 0x06 - ID (2 Byte):** This command requests the report of sensor values. The ID indicates the sensor type. The sensor types of the devices are listed below.
- **Downlink Command Configuration Get: 0x14 - IDX (2 Byte):** This command allows reading the configuration value IDX. The device will respond with an upstream command Configuration Report

Support and Contact

Should you encounter any problem, please give us the opportunity to address it before returning this product. Please check our website www.aqua-scope.com and particularly the support section for answers and help. You can also send a message to info@aqua-scope.com.

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Declaration of Conformity



Aqua-Scope Technology OÜ, Sakala 7-2, 10141 Tallinn, Republic of Estonia, declares that this radio emitting device works on the following frequencies:

Български С настоящото Aqua-Scope Technology OÜ декларира, че този тип радиосъоръжение GENLWE01 е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: www.aqua-scope.com/ce.

Čeština Tímto Aqua-Scope Technology OÜ prohlašuje, že typ rádiového zařízení GENLWE01 je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: www.aqua-scope.com/ce.

Dansk Hermed erklærer Aqua-Scope Technology OÜ, at radioudstyrstypen GENLWE01 er i overensstemmelse med direktiv 2014/53/EU. EUoverensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: www.aqua-scope.com/ce.

Deutsch Hiermit erkläre Aqua-Scope Technology OÜ, dass der Funkanlagentyp GENLWE01 der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: www.aqua-scope.com/ce.

Eesti Käesolevaga deklareerib Aqua-Scope Technology OÜ, et kesolev raadioseadme tüüp GENLWE01 vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni terviklik tekst on kättesaadav järgmisel internetiaadressil: www.aqua-scope.com/ce

English Hereby, Aqua-Scope Technology OÜ declares that the radio equipment type GENLWE01 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.aqua-scope.com/ce

Español Por la presente, Aqua-Scope Technology OÜ declara que el tipo de equipo radioeléctrico GENLWE01 es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: www.aqua-scope.com/ce

Ελληνικά Με την παρούσα ο/η Aqua-Scope Technology OÜ, δηλώνει ότι ο ραδιοεξοπλισμός GENLWE01 πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: www.aqua-scope.com/ce

Français Le soussigné, Aqua-Scope Technology OÜ, déclare que l'équipement radioélectrique du type GENLWE01 est conforme la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible l'adresse internet suivante: www.aqua-scope.com/ce

Hrvatski Aqua-Scope Technology OÜ ovime izjavljuje da je radijska oprema tipa GENLWE01 u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: www.aqua-scope.com/ce

Italiano Il fabbricante, Aqua-Scope Technology OÜ, dichiara che il tipo di apparecchiatura radio



GENLWE01 conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE disponibile al seguente indirizzo Internet: www.aqua-scope.com/ce

Latviešu Ar šo Aqua-Scope Technology OÜ deklarē, ka radioiekārta GENLWE01 atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: www.aqua-scope.com/ce Lietuvių Aš, Aqua-Scope Technology OÜ, patvirtinu, kad radijo įrenginių tipas GENLWE01 atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo internet adresu: www.aqua-scope.com/ce

Magyar Aqua-Scope Technology OÜ igazolja, hogy a GENLWE01 típus rádiberendezés megfelel a 2014/53/EU irányelvnek. Az EUMegfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: www.aqua-scope.com/ce

Malti B'dan, Aqua-Scope Technology OÜ, niddikjara li dan it-tip ta' tagħmir tar-radju GENLWE01 huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformit tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: www.aqua-scope.com/ce

Nederlands Hierbij verklaar ik, Aqua-Scope Technology OÜ, dat het type radioapparatuur GENLWE01 conform is met Richtlijn 2014/53/EU. De volledige tekst van de EUconformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: www.aqua-scope.com/ce

Polski Aqua-Scope Technology OÜ niniejszym oświadczam, że typ urządzenia radiowego GENLWE01 jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności I UE jest dostępny pod następującym adresem internetowym: www.aqua-scope.com/ce

Português O(a) abaixo assinado(a) Aqua-Scope Technology OÜ declara que o presente tipo de equipamento de rádio GENLWE01 está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: www.aqua-scope.com/ce

Română Prin prezenta Aqua-Scope Technology OÜ declară că tipul de echipamente GENLWE01 este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: www.aqua-scope.com/ce

Slovensko Aqua-Scope Technology OÜ potrjuje, da je tip radijske opreme GENLWE01 skladen z irektivno 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: www.aqua-scope.com/ce

Slovensky Aqua-Scope Technology OÜ týmto vyhlasuje, že rádiové zariadenie typu GENLWE01 je v slade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: www.aqua-scope.com/ce

Soumi Aqua-Scope Technology OÜ vakuuttaa, että radiolaitetyyppi GENLWE01 on direktiivin 2014/53/EU mukainen. EUvaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: www.aqua-scope.com/ce

Svenska Härmed försäkrar Aqua-Scope Technology OÜ att denna typ av radioutrustning GENLWE01 verensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EUförsäkran om verensstämmelse finns på följande webbadress: www.aqua-scope.com/ce

Disposal Guidelines



Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the



groundwater and get into the food chain, damaging health and well-being.