GS-C-01 / GS-R-02 SHIPPED

GridShield controller and receiver

ElaadNL-compliant GridShield over LoRa point-to-point: one hardware, two roles, sold as two products. The controller measures the main connection and sends the reduce signal; the receiver limits chargers over RS485 and other loads with two relays. Tested against ElaadNL's implementation in both directions. For neighbourhood congestion and for buildings, car parks and sites without a data cable.

Clamp inputs CT 1–3, LED and open-collector output OC 1; Modbus at the end

USB-C, OC 2 / antenna and relay outputs R1 and R2

Top view with the port labels

IN SHORT

Neighbourhood. A grid operator or ElaadNL uses GridShield as the last-resort signal on a shared cable or transformer: when the neighbourhood as a whole uses too much, every GridShield receiver scales down its chargers and heat pumps. EdgeTech's receiver is compliant with that signal and has been tested against ElaadNL's implementation in both directions.

Building, car park, site, home. The same pair works locally. The controller measures the main connection with clamps or a kWh meter and broadcasts headroom; receivers at the chargers, the heat pump or any other load act on it. No data cable, hundreds of metres of range, nothing to subscribe to.

PRICE € 370 excl. VAT · € 447.70 incl. VAT

CAD STEP and drawing: edgetech.eu/cad/gridshield.step

KEY FACTS

SPECIFICATION	VALUE
Roles	Controller (GS-C-01): measures the main connection, broadcasts the available capacity. Receiver (GS-R-02): acts on the broadcast. Same hardware and firmware, configured per role; the controller has a larger antenna and possibly a different casing.
Protocol	GridShield (ElaadNL), LoRa point-to-point at 868 MHz; no LoRaWAN, no gateway, no subscription
Interoperability	Tested against ElaadNL's GridShield implementation in both directions: EdgeTech controller with ElaadNL receivers, ElaadNL controller with EdgeTech receivers
Controller inputs	3 CT clamp inputs, or a Modbus kWh meter over RS485
Receiver outputs	RS485 Modbus (EdgeTech or compatible chargers), 2 relays (SG-Ready heat pump or any load), open-collector output
Range	Hundreds of metres in the open; several receivers per controller, several chargers per receiver
Supply	3.8–32 V DC via the Modbus connector or USB-C
Dimensions	35 × 105 × 11 mm board
On loss of signal	Receiver falls back to a configured safe limit after a configurable timeout
Made in	Europe

Test it in your project: info@edgetech.eu

Full specifications: edgetech.eu/products/gridshield