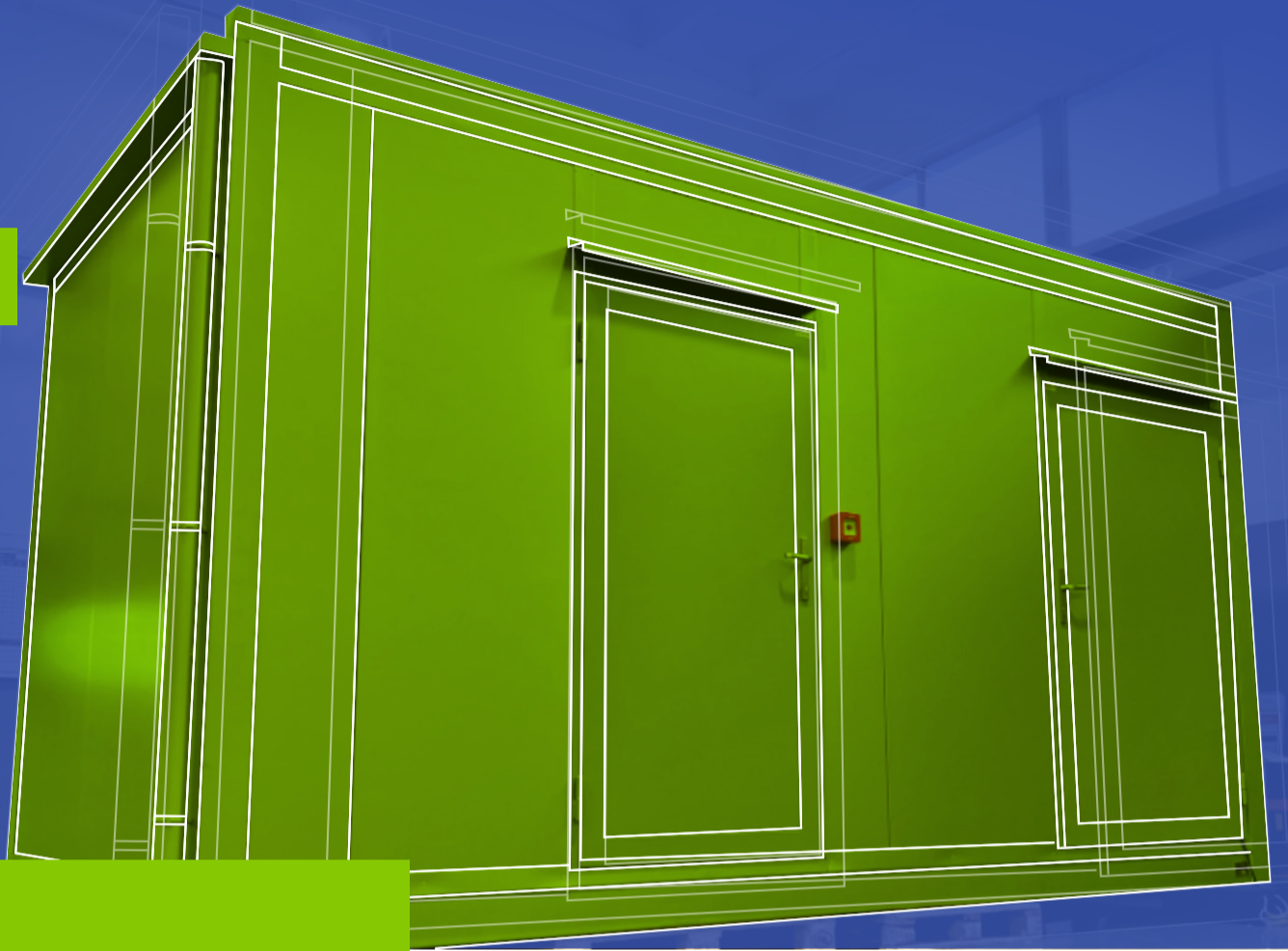


CONTAINER TRANSFORMER STATION



Elgór + Hansen SA



41-500 Chorzów
ul. Opolska 19



tel. +48 32 249 94 80
fax +48 32 241 34 57



www.elgorhansen.com
poczta@elgorhansen.com

We are part of Group

Grenevia

www.elgorhansen.com

ABOUT US

We provide technical solutions in the field of power supply systems, automation and control of machines and the whole industrial facilities.

We design electrical devices and electronic, automation and IT systems, including ATEX solutions for potentially explosive atmospheres. We have almost 30 years of experience in creating solutions for the industry.

We offer our own proprietary solutions, but we also use products from recognized and proven global brands. We support clients at every stage of the investment: from the design stage, the construction process, to the creation of documentation and the operation stage.

We are part of Group **Grenevia**



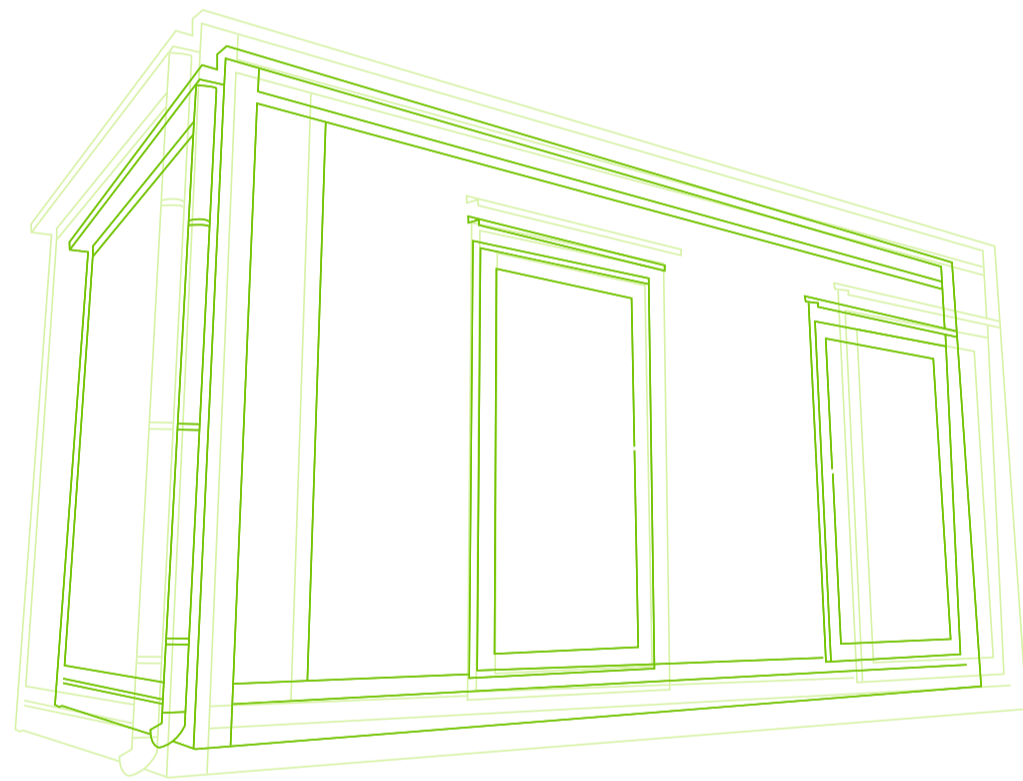
EH-nTS

The EH-nTS type transformer station manufactured by Elgór+Hansen is intended for the electric power generation plants using renewable energy sources such as PV farms.

The elements of the station are situated inside a metal structure, which is protected from corrosion and unfavorable weather conditions. The housing is made of steel shapes that form a self-supporting skeleton, which consists of: welded floor structure, flat roof and steel poles located in the corners of the housing.

The installation provides for the use of a transformer with a maximum capacity of 1000kVA and is designed to work with the medium voltage (MV) network from the Distribution Network side and the low voltage (LV) network from the generated energy receiving side.

The station is serviced locally from the stations main room or remotely thanks to the applied telemechanics systems.



It is recommended to place the station on concrete blocks to ensure stabilization. To properly prepare the installation site, please contact Elgór+Hansen for further assistance.



lower costs of transport and installation of the station in relation to analogous concrete structures



simple and quick on-side installation in relation to traditional concrete switchgears



overall dimensions enabling standard transport on public or private roads



free access to LV or MV switchgears from the inside of the station



light weight up to 5 tons (without transformer)



high reliability and **operational safety**



high level of anti-corrosion protection of the station's metal elements



possible switchgears configurations according to individual customer requirements

TECHNICAL PARAMETERS

up to 1000 kVA

transformer power
(up to 1600 kVA as request)

up to 4,5 tons

weight
(without transformer)

up to IP43

ingress
protection

up to 2900*5000*2700 mm

dimensions
(height x lenght x width)

50 Hz

rated
frequency

MV
LV

up to 24 kV

up to 800 V

rated
voltage

up to 630 A

up to 1000 A

continuous rated
current

up to 16 kA

up to 20 kA

short-term rated
current (1s)

up to 20 kA

up to 50 kA

peak rated
current

MVS

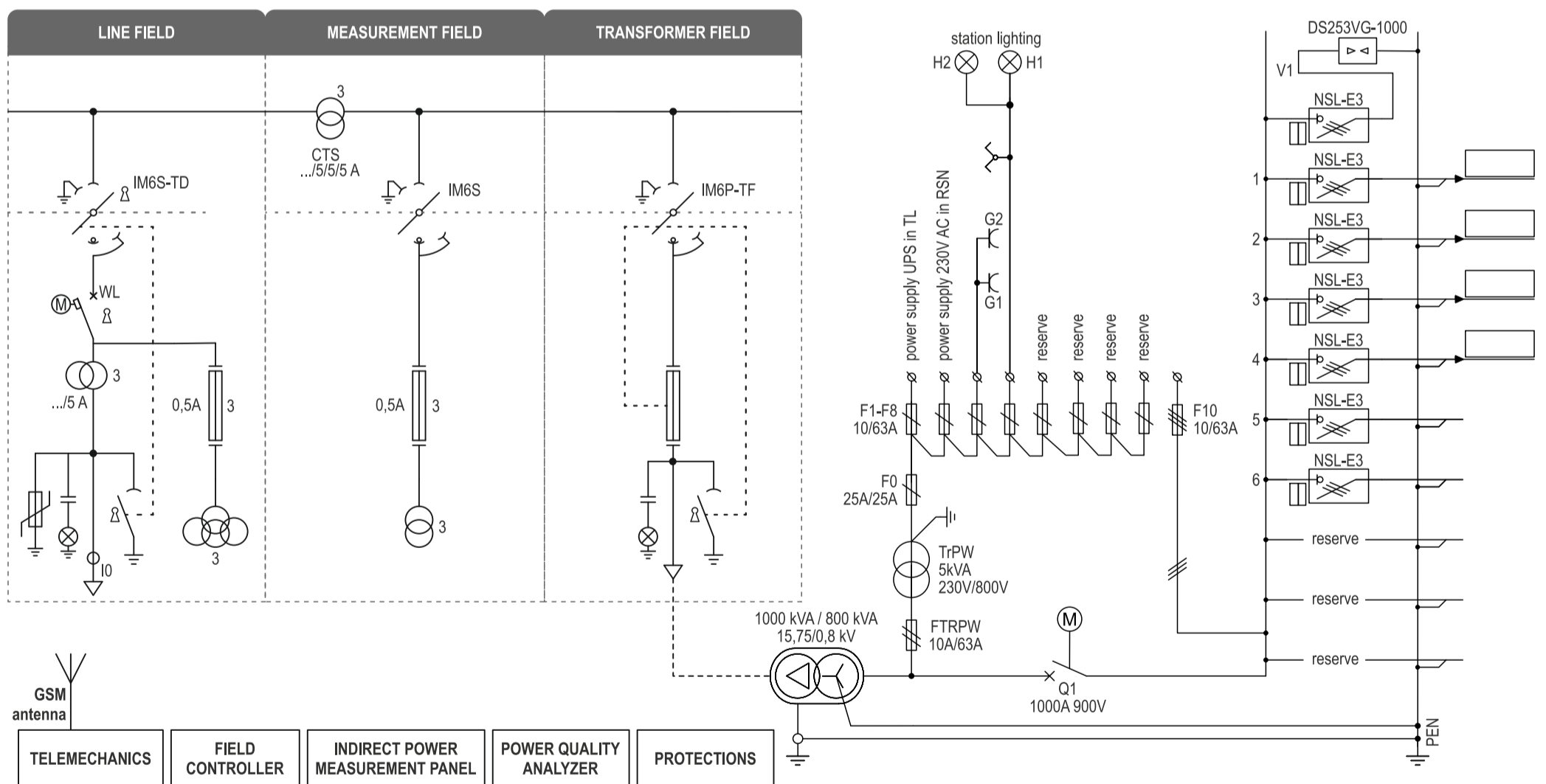
medium voltage switchgear

AS

auxiliary switchgear

LVS

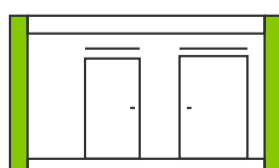
lower voltage switchgear



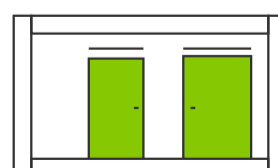
station diagram - an example



the flat roof performed as laminar structure with a roof membrane, thermal insulation and with varnished galvanized sheet



walls made of laminar panels in the so-called sandwich system with varnished galvanized sheet and insulated with mineral wool



housing equipped with thermally insulated metal **door** and air intakes to provide required ventilation of the station



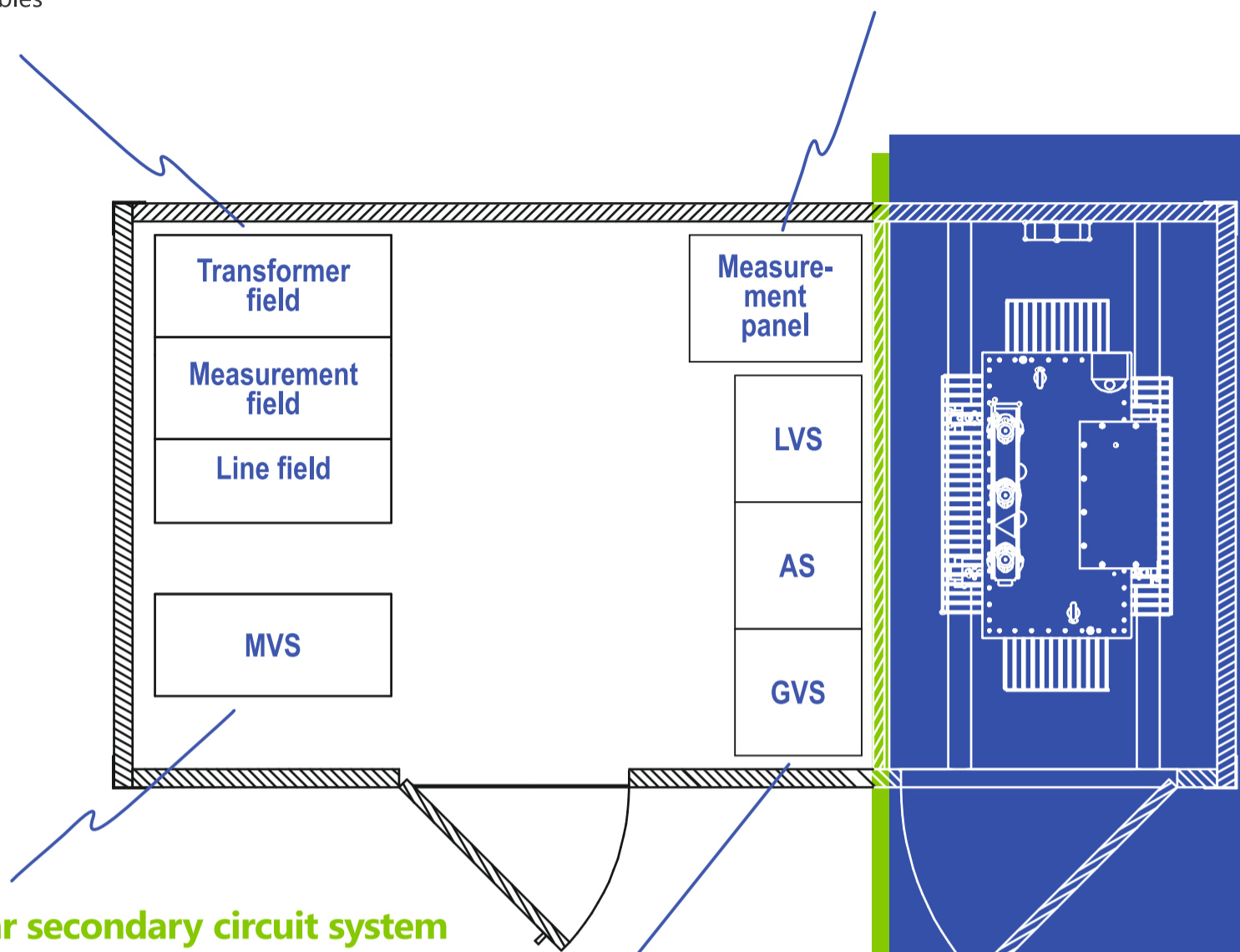
floor made of checkered steel sheets, bridging grille and a tin tank used as a leakproof oil drip-pan

MVS – medium voltage switchgear

- measurement field with current and voltage transformers
- feeder bay for connection of MV cables from distribution network
- transformer field for connections of the transformer MV side cables

Measurement & settlement system

- 3-phase electricity meter for active and reactive energy
- time synchronizer with GSP antenna
- GSM communication unit
- overcurrent protection of the meter
- reserve power supply UPS



MVS - switchgear secondary circuit system

- controller implementing the stations operation logic with a control and protection function
- controller of telemechanics systems enabling data transmission and the function of remote control of the station from the master system
- control and measurement equipment, including a power quality analyzer

LV/MV transformer

- upper voltage 15,75 kV or 21 kV
- lower voltage 800 V or different as required by customer
- power up to 1000 kVA
- losses as required by the Eco Design 2

LVS - lower voltage switchgear

- circuit breaker with overcurrent protection for connection on the LV side of a transformer
- fuse switch disconnectors for connecting wires inflow from power generating installations

Cable entry

- connecting cables enters the station in casing pipes through holes in the station floor

AS - 230V AC auxiliary switchgear

- overcurrent protection for control systems, measurement protection, automation and auxiliary circuits
- optional transformer

GVS - 24V DC guaranteed voltage switchgear

- buffer power supply 23 V AC / 24 V DC
- AGM 24 V / 45 Ah accumulators (optionally other capacities)

Rafał Szoltyśnik
commercial director
for the industrial market
rafal.szoltyśnik@elgorhansen.com
tel. +48 885 060 023

Adam Zawadzki
deputy of commercial director
for the industrial market
adam.zawadzki@elgorhansen.com
tel. +48 885 890 304

ELGÓR+HANSEN

www.elgorhansen.com