IP-Pro Alu EMC

IP65 enclosure to protect sensitive electronics

The die-cast aluminium enclosure **IP-Pro Alu EMC from nVent SCHROFF** offers robust IP protection up to IP65, is EMC shielded, as well as shock, vibration and corrosion resistant. It can be configured for electronics with standardized or customer-specific form factors.

The enclosure can be complemented by the expertise of nVent SCHROFF, which includes innovative solutions for PCB fixing, cable management and optimized cooling concepts.

RoHS Compliant

IP65

Order Number	Height (mm)	Width (mm)	Depth (mm)
26880-001	90	122	122
26880-002	90	220	122
26880-003	90	160	160
26880-004	90	260	160
26880-005	90	360	160
26880-006	110	200	230
26880-007	180	200	230
26880-008	110	330	230
26880-009	180	330	230
26880-010	110	401	230
26880-011	110	600	230
26880-012	110	402	310
26880-013	180	402	310
26880-014	110	600	310
26880-015	180	600	310

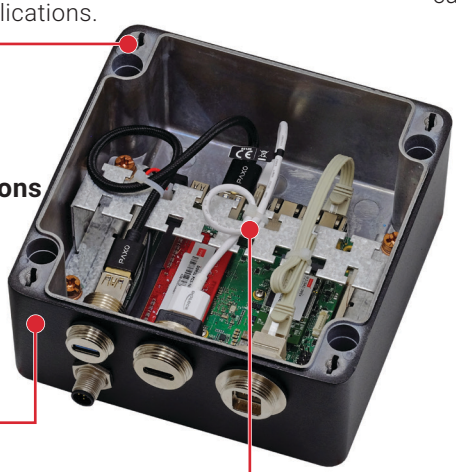
CUSTOMER-SPECIFIC DESIGN FOR EVERY APPLICATION

Configuration of a Flexible Enclosure Solution

The availability of 15 different dimensions and individual mechanical modifications, as well as solutions for PCB fixation and cable management, allow the use within different applications.

Optimal Heat Dissipation Concept

Convection and conduction cooling enables heat dissipation via the enclosure itself and can be adapted to the respective application.



Protection of Electronics in Indoor and Outdoor Applications

- Railway & Transportation
- Telecommunications
- Aerospace & Defense
- (Industrial) IoT

Simulations & Tests

Thermal simulations, IP or EMC tests ensure the design functionality.

Aesthetic Enclosure Design

The enclosure can be finished with powder coating, screen printing or digital printing. Colors have a high resistance to environmental conditions or chemicals.

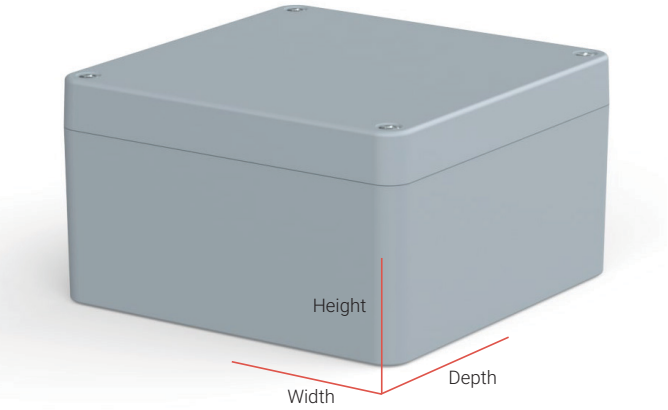
Development and Integration of Electronic Components

Customer-specific solutions including cabling, boards (e.g. COM Carrier) and integration services.

The product shown above is an EMC-protected enclosure with the dimensions H90 x B160 x T160 mm (26880-003) and has an integrated embedded NUC™ board.

Flexible IP65 enclosure solution for harsh environments

TECHNICAL DATA



Available in a Wide Range of Dimensions

- 15 different sizes from H90 x W122 x D122 mm to H180 x W600 x D310 mm
- Standard version in silver-grey (RAL 7001)

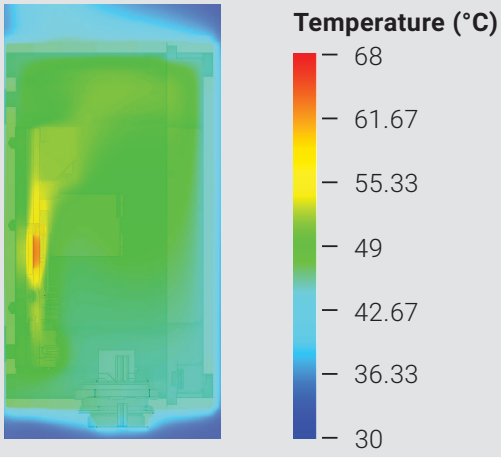
High Resistance to Environmental Conditions

- Protection class IP65 according to EN 60529, higher protection classes and outdoor use on request
- Temperature range of the enclosure –30 to +80°C, extended temperature range on request
- Corrosion resistance: Sharpness A (EN 62208/9.13.2.1) and sharpness B (EN 62208/9.13.2.2)

Reliable Protection Even in Harsh Conditions

- IK09 protection from external mechanical impacts according to IEC 62262
- Shock and vibration resistant according to EN 61373 Cat. 2 and AREMA Class I

THERMAL SIMULATIONS & EMC-TESTS



At **nVent SCHROFF**, thermal simulations are used in the early phase of product development in order to equip enclosures with an optimal cooling concept suitable for the application.

Test Setup with Conduction Cooling (pictured left):

- Processor: Intel® i7, 10th generation processor (mobile)
- Power dissipation of the processor: 15 W
- Ambient temperature: 30°C (87°F)
- Mounting the enclosure on an insulated wall
- Enclosure Size: H90 x B160 x T160 mm

Excellent EMC Properties

The integrated EMC shielding ensures reliable operation of the electronic components built into the enclosure.

Tested with an enclosure size of H90 x B160 x T160 mm for a frequency range from 30 MHz to 4 GHz.