



## CONNECT AND PROTECT

# Flexible IP-protected enclosure solution for harsh environments

Protects sensitive electronics with up to IP67



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# IP-Pro Alu EMC

## Protects sensitive electronics with up to IP67

The die-cast aluminium enclosure **IP-Pro Alu EMC** from **nVent SCHROFF** offers robust IP protection up to IP67, is EMC shielded, as well as shock, vibration and weather 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.



Order Number	Height (mm)	Width (mm)	Depth (mm)	IP-Level
26880-001	90	122	122	66/67
26880-002	90	220	122	66/67
26880-003	90	160	160	66/67
26880-004	90	260	160	66/67
26880-005	90	360	160	65
26880-006	110	200	230	66/67
26880-007	180	200	230	66/67
26880-008	110	330	230	65
26880-009	180	330	230	65
26880-010	110	401	230	65
26880-011	110	600	230	66/67
26880-012	110	402	310	65
26880-013	180	402	310	65
26880-014	110	600	310	66/67
26880-015	180	600	310	66/67

### 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.



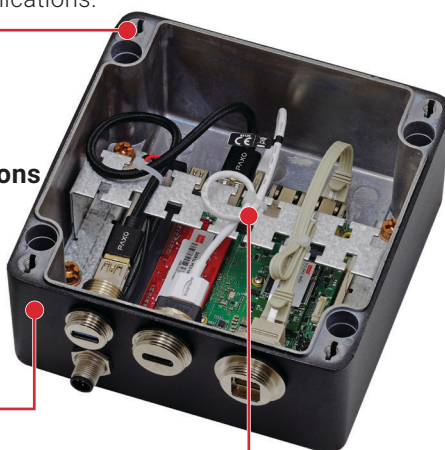
#### Aesthetic Enclosure Design

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

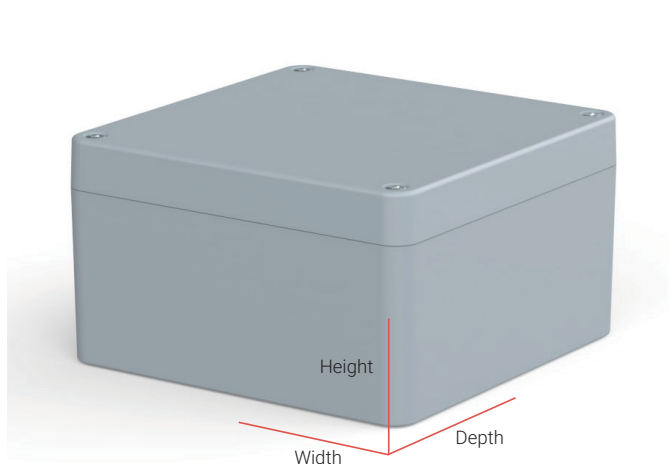
Customer-specific solutions including cabling, boards (e.g. COM Carrier) and integration services.



The product shown above is an EMC-protected enclosure with the dimensions H90 x W160 x D160 mm (26880-003) and has an integrated embedded NUC™ board.

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## 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)

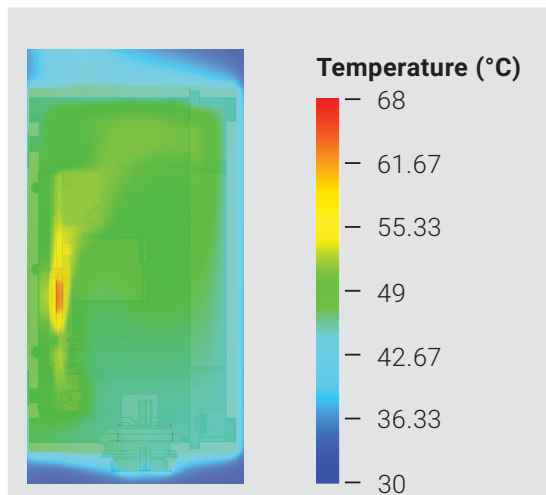
### High Resistance to Environmental Conditions

- Protection against water and dust with up to IP67 according to EN 60529
- Temperature range of the enclosure  $-40$  to  $+90^{\circ}\text{C}$
- Weather resistant powder coating to suit outdoor applications

### 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, 10<sup>th</sup> generation processor (mobile)
- Power dissipation of the processor: 15 W
- Ambient temperature:  $30^{\circ}\text{C}$  ( $87^{\circ}\text{F}$ )
- Mounting the enclosure on an insulated wall
- Enclosure Size: H90 x W160 x D160 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 W160 x D160 mm for a frequency range from 30 MHz to 4 GHz.

