

YOUR ADVANTAGE

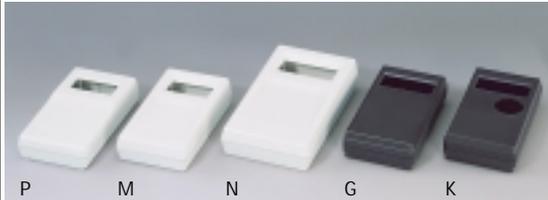
- These cases are ergonomic and easy to use.
- Prepared for mounting of digital or analogue display modules.
- Battery compartment with snap-in-mechanism for the quick change of batteries.
- With or without switch cap / slide switch cap, also for multimeters.
- High front end for the mounting of connectors.
- Recessed operating area for the protection of membrane keyboards and operating elements.

STANDARD COLOURS

Black, RAL 9005 resp. black brown, RAL 8022.
Off-white, RAL 9002.
Please refer to colour chart on page 228.

MATERIAL

ABS (UL 94 HB).
Also available in other materials on request. Please refer to the specifications on pages 229-231.



ROBUST, MOBILE, HANDY

Successfully used cases for multiple and single measuring and for mobile data recording.

Available in five different types.

The boxes are easy to handle and easy to service.

The variety of boxes is so large that we are sure you will find a case to suit your specific requirements exactly.

APPLICATIONS

Useful hand-held-boxes for mounting of digital or analogue instruments. Versatile useable in the measuring and control technology, e.g. continuity checker and volt meter, field intensity meter, digital thermometers etc.

EMC

Cases marked with ⚡ are available with aluminium metallization on demand. The contact areas of top and bottom part are poor. See also pages 226-227.

SERVICE-CENTER

Machining on modern CNC-controlled machines. Lacquering, Silk screen and tampo printing. See pages 221-227.

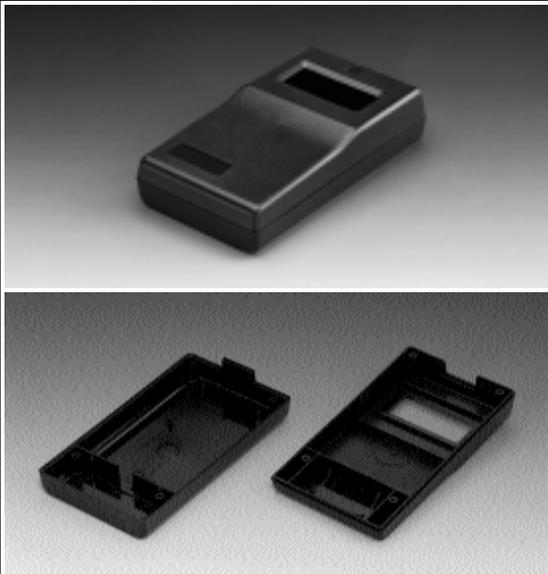
HAND-HELD-BOX P



HAND-HELD-BOX

DESIGN

Successfully used case for measuring instruments of handy pocket size. With recessed area for imprints or your logo. Cut-out section for LCD or analogical modules with active area up to 50 x 20 mm. With battery compartment, accessible from the outside, for 9 V flat battery (PP3) or one 1.5 V baby cell (C) with contacts for soldering. Raised front area to accommodate plugs.



Battery compartment for one 9 V flat battery (PP3) or one 1.5 V baby cell (C) with contacts for soldering.

ASSEMBLY

Case parts are assembled by 4 self-tapping screws. Snap-in battery compartment lid.

VERSION I

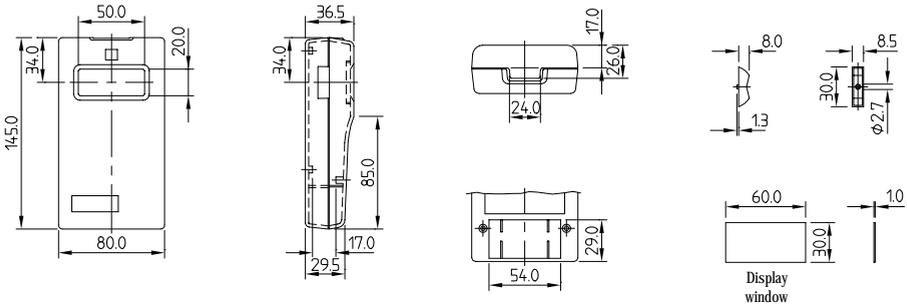
With lateral recess for rocker switch.

VERSION II

Without lateral recess.

Detailed drawing available on demand in dwg, dxf or pdf format.

⊕ ⊕ = Type of screw for case fixing: cross head



Max. size of PCB: base part 71 x 106 mm, top part 72 x 106 mm (cutouts for pillars not taken into consideration)

⊕ H (PH1)

| | CASE (Part-No. with \neq see EMC page 50) | | | Version | Part-No. | |
|--|---|-------------|-------------------------------------|-----------|----------|--------------------|
| | Outside dimensions in mm | | | | | |
| | L | W | H | | | |
| | 145 | 80 | 36.5 / 29.5 | black | I | A 90 60 009 \neq |
| | 145 | 80 | 36.5 / 29.5 | off-white | I | A 90 60 007 \neq |
| | 145 | 80 | 36.5 / 29.5 | black | II | A 90 60 019 \neq |
| | 145 | 80 | 36.5 / 29.5 | off-white | II | A 90 60 017 \neq |
| | ACCESSORIES | | | | | |
| | Article | Colour | Version / Application | | | |
| | Switch cap | black | for rocker switch application | | | A 91 60 009 |
| | Switch cap | off-white | for rocker switch application | | | A 91 60 007 |
| | Cover plug | black | cover the screw holes in the bottom | | | A 91 60 002 |
| | Plug-in-contact | blue | for 1 x 9 V flat battery (PP3) | | | A 91 60 003 |
| | Display window | transparent | plexiglass | | | A 91 60 004 |
| | Adhesive foil | transparent | for fastening the display window | | | A 91 60 006 |

SERVICE-CENTER

See pages 221-227.

Reference: Suitable tilt foot bar see accessory on page 214.

HAND-HELD-BOX N



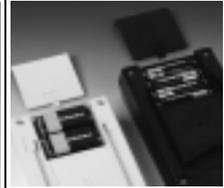
HAND-HELD-BOX

DESIGN

Large exclusive hand-held case. With recessed area, e.g. for membrane key-boards, control elements. Cut-out section for digital and analogical modules with active area up to 65 x 23 mm. Version with battery compartment either for two 9 V flat batteries (PP3) or four 1.5 V mignon cells (AA), accessible from the outside. Raised front area to accommodate plugs.

ASSEMBLY

Case parts are assembled by 4 self-tapping screws. Snap-in battery compartment lid.



Version I with battery compartment for two 9 V flat batteries (PP3) or four 1.5 V mignon cells (AA).

VERSION I

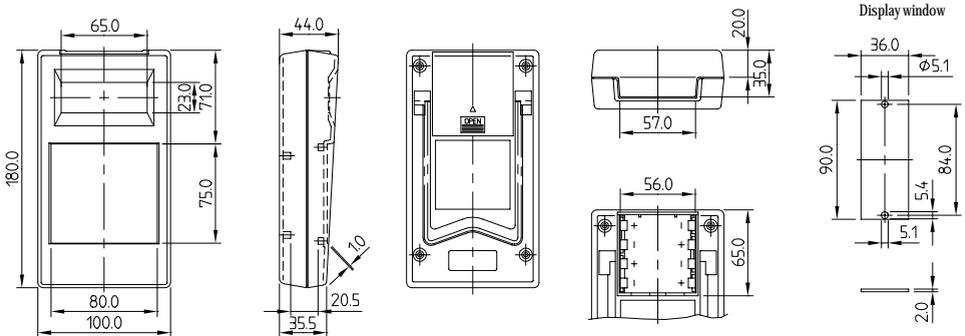
With battery compartment for two 9 V flat batteries (PP3) or four 1.5 V mignon cells (AA).

VERSION II

Without battery compartment.

Detailed drawing available on demand in dwg, dxf or pdf format.

⊕ ⊕ = Type of screw for case fixing: cross head



Max. size of PCB:

top part 91 x 169, base part without battery compartment 91 x 168 mm or with battery compartment 91 x 109 mm (cutouts for pillars not taken into consideration) ⊕ Z (PZ1)

| CASE (Part-No. with \neq see EMC page 50) | | | | Part-No. | |
|---|---------------|----------------------------------|-----------|----------|--------------------|
| Outside dimensions in mm | | | Colour | Version | |
| L | W | H | | | |
| 180 | 100 | 44 / 35.5 | black | I | A 90 61 019 \neq |
| 180 | 100 | 44 / 35.5 | off-white | I | A 90 61 017 \neq |
| 180 | 100 | 44 / 35.5 | black | II | A 90 61 119 \neq |
| 180 | 100 | 44 / 35.5 | off-white | II | A 90 61 117 \neq |
| ACCESSORIES | | | | | |
| Article | Colour | Version / Application | | | |
| Set of battery clips | tin plated | for 4 x 1.5 V mignon cells (AA) | | | A 91 61 001 |
| Plug-in contact | blue | for 1 x 9 V flat battery (PP3) | | | A 91 60 003 |
| Tilt foot bar | chrome plated | steel, for ergonomic canting | | | A 93 61 009 |
| Display window | transparent | plexiglass | | | A 91 61 004 |
| Adhesive foil | transparent | for fastening the display window | | | A 91 61 005 |

SERVICE-CENTER

See pages 221-227.



DESIGN

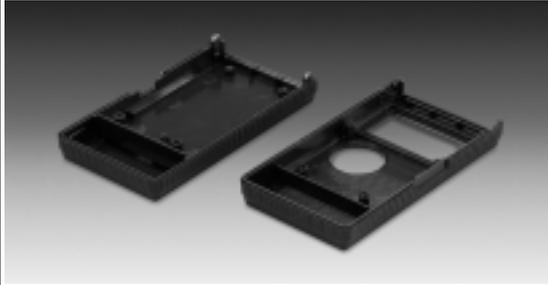
Clearly styled hand-held case with ridged side areas affording a firm grip. Suitable for two-layer PCB mounting. Version I with recessed area 142.4 x 71 mm for membrane keyboards or imprinting. Cut-out section for digital and analogical modules with active area up to 60 x 25 mm. Battery compartment for 9 V flat battery (PP3), accessible from the outside.

VERSION I

HAND-HELD-BOX G.
Without lateral recess.
With removable front panel.

VERSION II

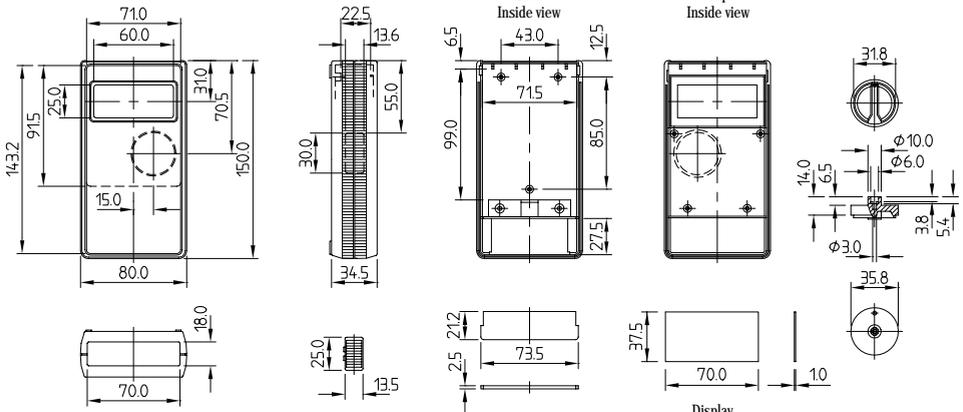
HAND-HELD-BOX K.
Special type for multi-meters.
With lateral recess for slide switch and borehole for knob on the upper side.
With removable front panel.



ASSEMBLY

Case parts are assembled by 2 screws. Removable and plug-in type rear panel.

Detailed drawing available on demand in dwg, dxf or pdf format.



Max. size of PCB: base part 70 x 111 mm, top part 72 x 111 mm (cutouts for pillars not taken into consideration)

⊗ Z (PZ1)

| Part-No. | CASE (Part-No. with \neq see EMC page 50) | | | Colour | Version |
|--------------------|---|----|--|-------------|---------|
| | Outside dimensions in mm | | | | |
| | L | W | H | | |
| A 90 63 011 \neq | 150 | 80 | 34.5 | black brown | I |
| A 90 63 021 \neq | 150 | 80 | 34.5 | black brown | II |
| ACCESSORIES | | | | | |
| Article | Colour | | Version / Application | | |
| A 91 63 001 | black brown | | Switch knob | | |
| A 91 63 003 | black brown | | Slide switch cap | | |
| A 91 60 003 | blue | | Plug-in contact for 1 x 9 V flat battery (PP3) | | |
| A 91 63 004 | transparent | | Display window plexiglass | | |
| A 91 63 005 | transparent | | Adhesive foil for fastening the display window | | |

SERVICE-CENTER

See pages 221-227.