



PWA | SOLUTIONS

WE MAKE *IT*

WORK

MAKING WORK EASIER, BETTER, FASTER FOR YOU – THAT'S OUR GOAL.

Latest technology, market-leading equipment and well thought-out ideas of our specialists set new standards for future-oriented IT applications.

Use the innovative solutions of the PWA DEVELOPMENT TEAM to optimize your workflow in harsh environments.

TOUGHBOOK OPTIMIZED



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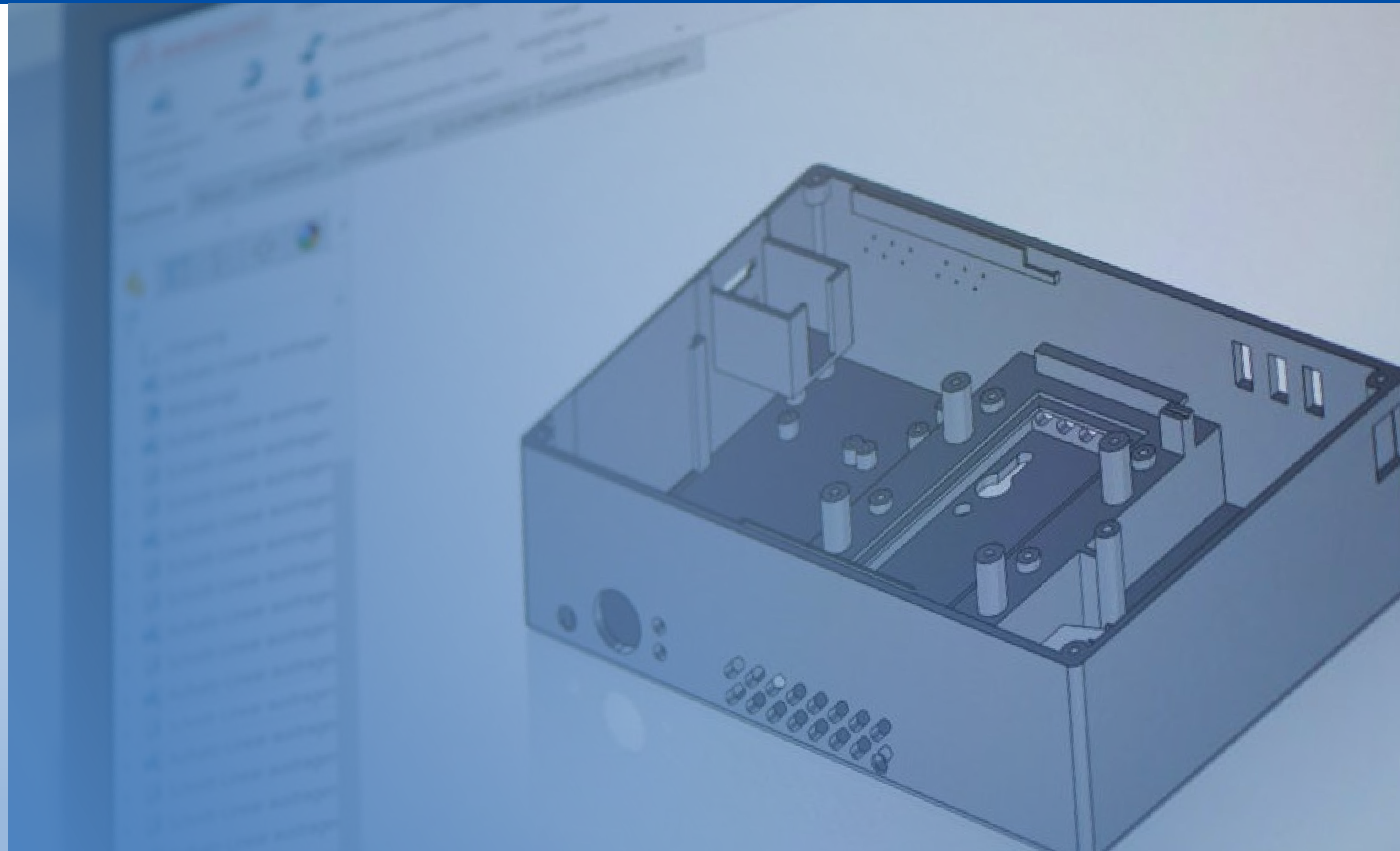
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OPTIMIZED SMART CARD READER

G2_OPEN SCR

FUNCTION

The OPEN SCR for the TOUGHBOOK G2 is slightly bevelled and raised for better usability.

FACTS

Original PANASONIC SCR with optimized housing.

- Handling of smart cards in the reader has been improved:
 - Easy insertion/removal due to open card slot
 - The card no longer bumps against the touch pen fixed to the device.
 - The card can be gripped horizontally and vertically.
- Encapsulated mounting:
While the card reader is open, the tablet unit keeps being protected from penetrating rain (tested tightness by PWA rain simulator)
- Original-hardware from PANASONIC installed

ORDER NUMBER

PWA_G2_OSCR

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INTUITIVE FIXATION AND HANDS FREE G2_MAGNETO

FUNCTION

By four embedded magnets based on the GIANT CORNER GUARDS, individual fixation to metallic, ferromagnetic surfaces is possible.

FACTS

- Fixation of various brackets possible
 - 2-/4-point carrying solutions (carabiner)
- Felt pads can be added to ensure scratch protection.

AREAS OF APPLICATION

- Workshops (car, automotive etc.)
- Chemical
- Production

ORDER NUMBER

PWA_G2_MAG



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ERGONOMIC CARRYING HANDLE

G2_RUGGED HANDLE

FUNCTION

For better carrying comfort and as an alternative carrying solution, the RUGGED HANDLE offers the possibility of a solid grip on the TOUGHBOOK G2.

FACTS

- „Handle carrying system“
- Improved ergonomics when working in the hand due to the bevelling of the handle
- With addition of the lower GIANT CORNER GUARDS, a straight support surface is achieved.
- Integrated loops additionally enable the use of a 2- or 4-point carrying strap.

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PWA_G2_RH



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2 IN 1 - HANDLE AND STAND

G2_PUT UP HINGE

FUNCTION

Modification of the RUGGED HANDLE as a stepwise adjustable tablet stand and/or variable handle.

FACTS

- The handle can be converted into a stand in 60° steps.
- „Handle carrying system“
- Improved ergonomics when working in the hand due to the bevelling of the handle
- By adding the lower GIANT CORNER GUARDS a plain support surface is obtained.

ORDER NUMBER

PWA_G2_PuH



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HANDS FREE WHEN MEASURING

G2_POLE HOLDER

FUNCTION

With the POLE HOLDER, the TOUGHBOOK G2 can be fixed to a pole or round pipe as well as to plumb rod in everyday surveying.

FACTS

- Passive holding tray with manual lock
- Combined with adjustable double ball mount with claw clamp
- Designed for pipe diameters from 25 - 40 mm

ORDER NUMBER

PWA_G2_PH

MORE INFO?

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HANDS FREE WHEN MEASURING

G1_POLE HOLDER

FUNCTION

With the POLE HOLDER, the TOUGHBOOK G1 can be fixed to a pole or round pipe as well as to plumb rod in everyday surveying.

FACTS

- Passive holding tray with manual lock
- Combined with adjustable double ball mount with claw clamp
- Designed for pipe diameters from 25 - 40 mm

ORDER NUMBER

PWA_G1_PH

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VENDOR'S TRAY FOR THE G2 WITH KEYBOARD G2_4 POINT CARRIER

FUNCTION

Fixation loops for the 4-point carrying strap system are attached to the keyboard unit: two of them are firmly screwed and two are provided with hand clamps for easy manual release if required.

FACTS

Hand clamps

- Fix themselves by the net weight of the computer
- Are easily removable when weight is relieved. This ensures that the computer can be closed and placed in the docking station.

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PWA_G2_4PC

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MORE RUGGEDNESS, MORE OPTIONS

G2_GIANT CORNER GUARDS

FUNCTION

The GIANT CORNER GUARDS are designed to be slightly higher in order to provide sufficient protection for attachments/solutions protruding deeper from the TOUGHBOOK G2 when dropped, as well as a straight support surface. In addition, they expand the options by providing fixation alternatives for various mounts.

FACTS

- Drop resistance up to 120 cm
- TOUGHBOOK G2 lies flat, including protruding solutions such as TRIMBLE RADIO.

Fixation of various holders possible

- TOUGHBOOK G1 rotation strap
- 2-/4-point carrying solutions
- TOUGHBOOK CF-20/G1/G2 hand strap

- Can also be used individually.

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PWA_G2_GCG

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USB DONGLE SECURELY PACKED

G2_USB DONGLE COVER

FUNCTION

Cover for dongle solutions such as WLAN or security etc.

FACTS

- Cover can be ordered as an option if required
- Ergonomic design
- Pleasant haptics

ORDER NUMBER

PWA_G2_USBDC

Successfully used
by monitoring
organisations in
Germany



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3 IN 1 HOLDING SOLUTION

33/G2_HANDLE HAND STRAP HOLSTER

FUNCTION

1. HANDLE: Classic „handle carrying solution“
2. HAND STRAP: Ergonomic hand holder while the tablet is placed on the forearm for usage
3. HOLSTER: Tablet can be easily hung up due to the curved handle.

ORDER NUMBER

PWA_33_HHH
PWA_G2_HHH

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ALSO
AVAILABLE AS
G2-VERSION



OPTIMIZED SLIM VERSION

G2_NO CORNER GUARDS + PEN HOLDER

FUNCTION

The unit corners have been reduced in size to make the unit as slim as possible.

FACTS

- Only with the NO CORNER GUARDS the TOUGHBOOK G2 fits into slim dockings such as the GAMBER & JOHNSON Slim Dock.
- The PEN HOLDER attached to the side enables the secure fixation of the touch pen to the tablet.

ORDER NUMBER

PWA_G2_NCG + PWA_G2_PeHo_B



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OPTIMIZED OPERATION

G2_REAR PEN HOLDER

FUNCTION

The original pen holder in the same orientation has been optimized.

FACTS

- Easy change of the original to the REAR PEN HOLDER, exchange possible by self-assembly.
- The engagement and disengagement process works more smoothly.

ORDER NUMBER

PWA_G2_RPH



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TIGHT - EVEN WITHOUT A BATTERY

G2_AKKU DUMMY

FUNCTION

The AKKU DUMMY allows to seal and cover the battery compartment even in pure mains operation.

FACTS

- Covers the battery bay for better handling (when operating without battery)
- Seals the battery connector of the tablet (splash water tested)

ORDER NUMBER

PWA_G2_AkkuDummy

Already installed
in submarines
and successfully in use



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SURVEY SOLUTIONS

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G2_OPTIONAL GPS	>> P. 22
G2_FLX 100 MOUNT	>> P. 23



HIGH PRECISION AT A FAIR PRICE

G2_RTK GNSS

FUNCTION

The fully integrated high precision GNSS receiver enables the TOUGHBOOK G2 with our RTK-GNSS solution correction data based satellite positioning up to an accuracy in the submeter range.

FACTS

- Supports all major GNSS systems: GPS, GLONASS, Galileo, Beidou and QZSS
- Data export: NMEA
- Fast cold start initialisation time: 25 s - 30 s (depending on satellite usage)
- Initialisation time for repositioning: 2 s
- No connection via Bluetooth etc. required
- IP65 protection is maintained after installation of the antenna, thanks to a custom-fit sealing system.
- Your TOUGHBOOK G2's warranty remains unaffected by the modification.
- Rotatable and bendable antenna, an overhead antenna is available as an option.
- Windows 11 Pro

ORDER NUMBER

PWA_G2_RTK

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FULLY INTEGRATED TRIMBLE MODULE

G2_TRIMBLE RADIO

FUNCTION

The attachment including electronics on the TOUGHBOOK G2 enables a radio connection with a TRIMBLE total station. The solution is mainly used in the field of GIS geo-surveying and simplifies the measurements there. Successor version to the G1 TRIMBLE RADIO.

FACTS

Results from range tests:

- 500 m facing the total station
- 400 m away from the total station
- Tested tightness by PWA-rain simulator

Fall protection:

- GIANT CORNER GUARDS and hand strap
- Antenna plug is protected due to rear positioning on the TOUGHBOOK G2. The antenna protrudes if needed.
- Fully integrated via top optional USB interface

PERFORMANCE TRIMBLE MODUL

Details of the installed electronics:

- Compatible with TRIMBLE total station
- Frequency: 2.4 - 2.483 GHz
- Power level: +10 / +18 dBm
- Consumption: 40 mA @ 3.3 V
- Aerial terminal: RP-TNC

ORDER NUMBER

PWA_G2_TF

MORE INFO?

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LONG RANGE BT FULLY INTEGRATED G2_LRBT RADIO

FUNCTION

Mounting the antenna incl. electronics on the TOUGHBOOK G2 allows a radio connection via long range bluetooth with a total station. Mainly used in the field of GIS geo-surveying. Successor version to the G1 LRBT RADIO.

FACTS

Results from range tests:

- 850 m directed to the total station
- 450 m away from the total station
- Tested tightness by PWA-rain simulator

Fall protection by:

- GIANT CORNER GUARDS and hand strap
- Antenna connection is possible due to rear positioning on the TOUGHBOOK G2. The antenna protrudes when in use.
- Fully integrated via upper optional USB interface

PERFORMANCE LRBT MODULE

Details of the installed electronics:

- Compatible e.g. with LEICA Radio Handle RH17 & RH18
- Frequency: 2.4 GHz
- Power level: +13 dBm
- Consumption: 44 mA @ 3 V
- Aerial terminal: RP-SMA

ORDER NUMBER

PWA_G2_lrBT

MORE INFO?

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U-BLOX MODULE EXPANDABLE G2_OPTIONAL GPS

FUNCTION

Dedicated GPS for TOUGHBOOK G2.
Expandable to the upper optional slot.

FACTS

- The original configurable GPS chip:
U-BLOX 8 UBX-M8030-KT
- Tested tightness by PWA-rain simulator
- Measurement precision identical to
original module: less than 2,5 m (2D)

ORDER NUMBER

PWA_G2_oGPS



WITH STAMPED
GNSS SYMBOL

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LEICA FLX 100 DIRECTLY ON THE TABLET

G2_FLX 100 MOUNT

FUNCTION

The dynamic fixation of the LEICA FLX 100 antenna on the TOUGHBOOK G2 enables optimized GNSS application areas.

FACTS

- Easy fixation and release of the GNSS antenna
- Rugged mounting
- Easy to combine with the G2 POLE HOLDER
- By using the original LEICA fixation flange, a quick change to the classic pole fixation is easily possible.

ORDER NUMBER

PWA_G2_FLX

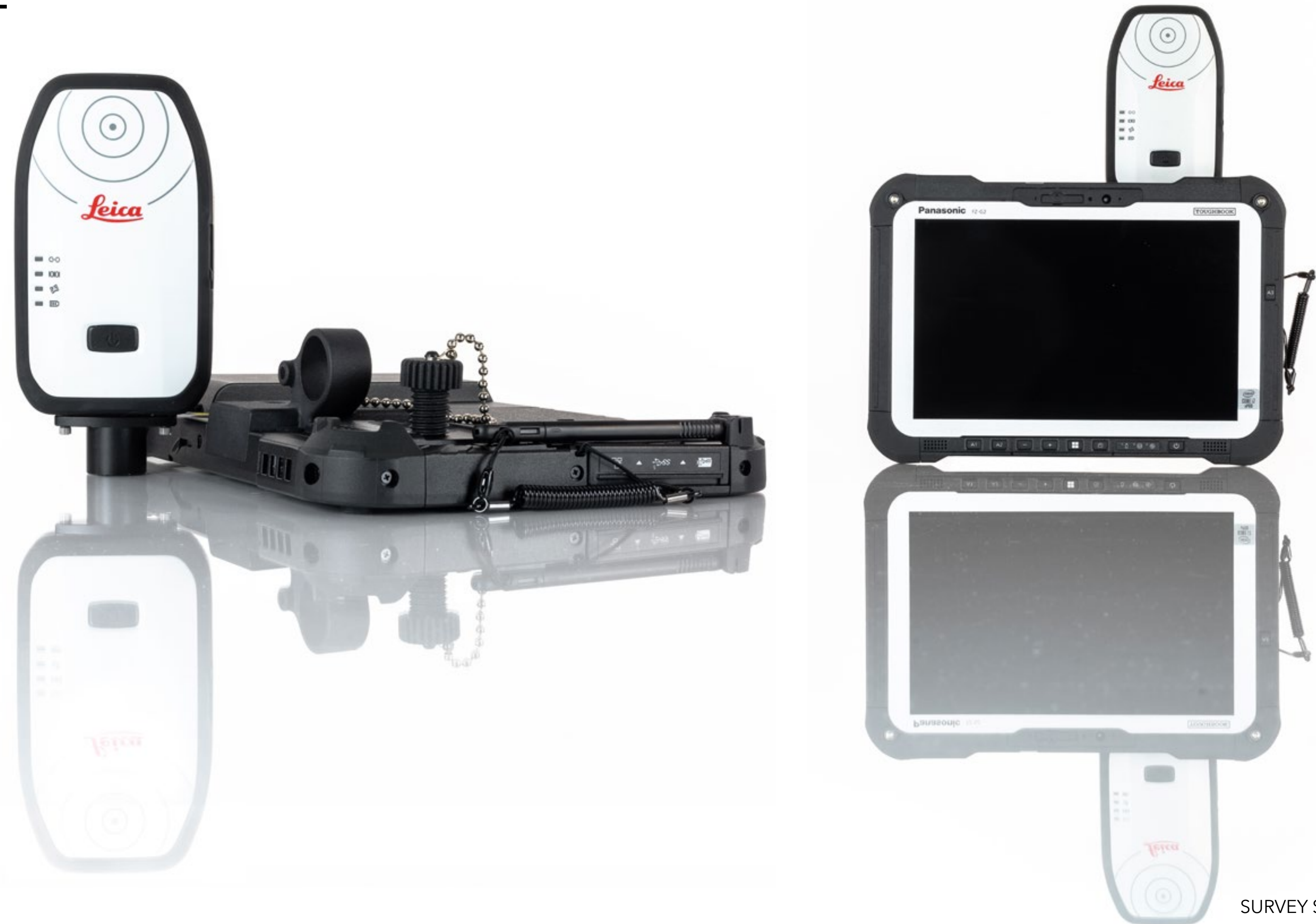
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WIRELESS ELEMENTS



G2_NFC READER

>> P. 25

QUICKLY EXPANDABLE: NFC READER

G2_NFC READER

FUNCTION

Fully integrated NFC READER for the upper optional slot of the TOUGHBOOK G2

FACTS

- Fully integrated and ergonomically shaped
- Dockable in HAVIS car mount
- Scanning possible on top and on the back of the device
- Parallel use of NFC and SCR (e.g.: OPEN SCR) possible
- Tested tightness by PWA-rain simulator

NFC scandistance:

- Top edge 1 cm
- Back edge 3 cm

ORDER NUMBER

PWA_G2_NFC

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WITH STAMPED
GNSS SYMBOL



EMERGENCY SERVICE SOLUTIONS



G2_MEDICAL BUNDLE

>> P. 27

OPTIMIZED FUNCTIONS FOR MEDICAL G2_MEDICAL BUNDLE

FUNCTION

Optimized for use in the ambulance: The cards of the rescue team and the patient cards can be read simultaneously via the OPEN SCR and the NFC READER.

The RUGGED HANDLE also offers improved handling: It enables quick gripping, comfortable placing on the forearm and more comfort during transport.

FACTS

- Combination of several solutions: OPEN SCR, NFC READER, GIANT CORNER GUARDS and RUGGED HANDLE
- Two-fold SCR use (NFC and standard SCR) is possible simultaneously

ORDER NUMBER

PWA_G2_MEDICAL

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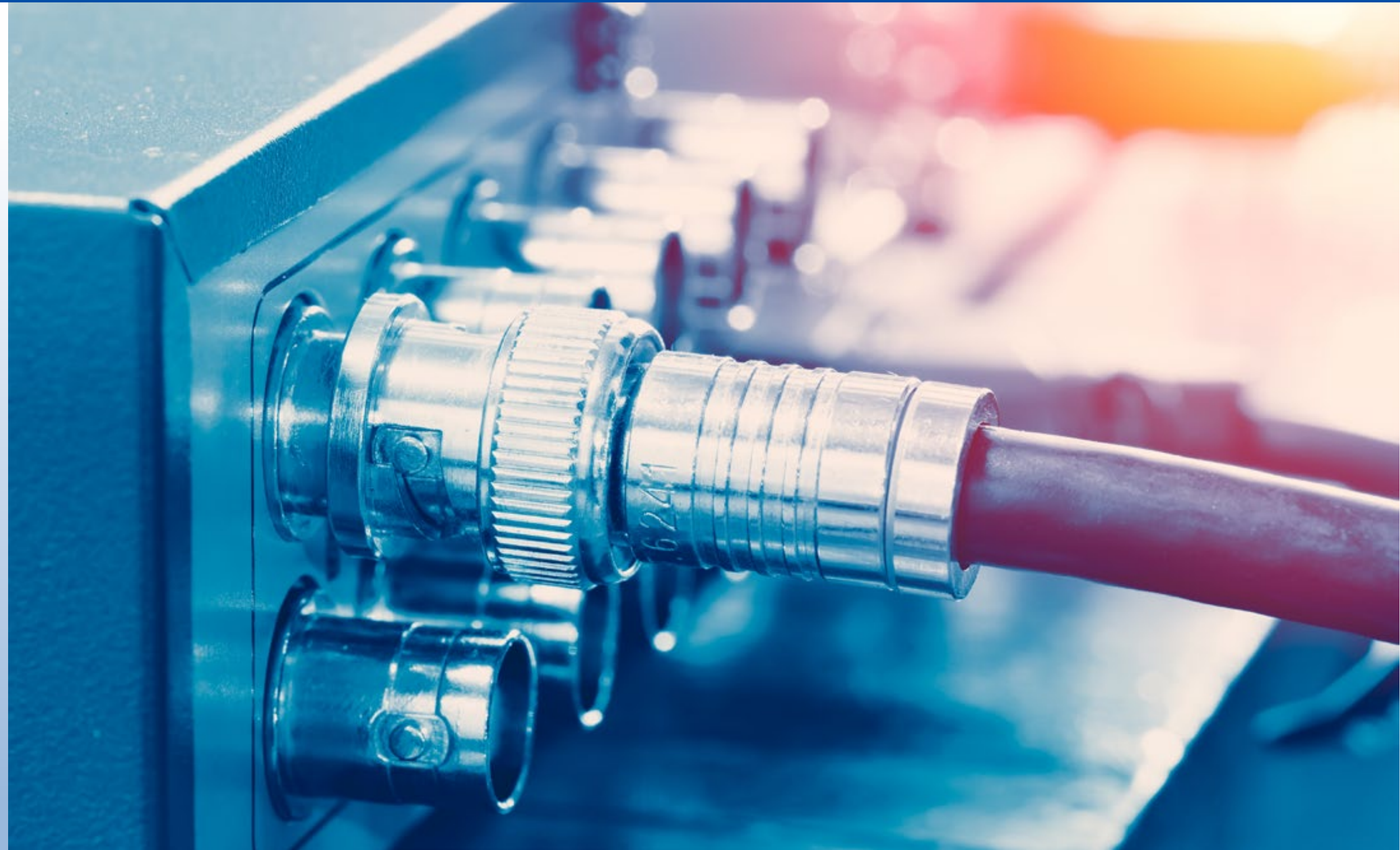
CONNECTOR ELEMENTS

G2_ANTENNA PLUG + USB

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G2_RUGGED USB

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MOBILE SINGLE PASS THROUGH

G2_ANTENNA PLUG + USB

FUNCTION

The solution for mobile connection of an external antenna.

FACTS

- The upper USB connection is retained if required.
- Expandable antenna connections: WLAN, WWAN, Bluetooth

ORDER NUMBER

PWA_G2_APUSB



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ROBUST CONNECTION FOR INTERFACE

G2_RUGGED USB

FUNCTION

Individually configurable robust interface

FACTS

- Even rain-protected when open
- Protection caps can be added
- Available for well-known brands: LEMO, FISCHER etc.
- Further individualized brands possible

ORDER NUMBER

PWA_G2_RUSB



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WE MAKE EVERYTHING WORK!

Our expertise are solutions that make your work easier. Through prefabricated in-house or new developments that meet your individual application areas: That's how WE MAKE IT WORK.

Contact us. We've got more than just one professional solution, that is a perfect fit for you!



FELIX HEIN-KECK and the PWA DEVELOPMENT TEAM



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