



++ outdoor display with best-view guarantee ++ shock-proof protection glass ++ ultra-ruggedized design ++



Integrated DGPS available  
for wireless measuring  
with high accuracy

[www.robust-pc.com](http://www.robust-pc.com)

# colibri X7 protect

black edition

Tablet-PC made in Germany



# THE ULTIMATE IN OUTDOOR CONVENIENCE



The colibri X7 protect from Mettenmeier is provided with the very best outdoor display throughout the world. The brilliant contrast even at brightest sunlight enables the use of graphical applications with high degree of detailing. This way inactive periods due to weather conditions are considerably reduced. The amazing colibri technology also supports an eye-friendly and stress-free handling.

With the ultra-robust magnesium housing combined with the shock-proof protection glass the colibri X7 protect not only meets the protection class IP 65, but is also fully prepared for use in the field. The throughgoing construction including its robust connectors offers optimal protection from cold, heat, moisture, sun, dust and strong vibrations.

Thanks to an impressive combination of robustness and power, the colibri X7 protect is the first choice for everyone wishing to combine mobile applications with reliability and outdoor use. Engineering, production and service "made in Germany" also ensure long-time durability as well as reliability and investment protection.



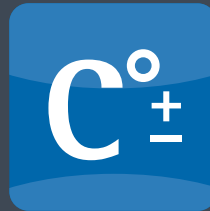
Glare



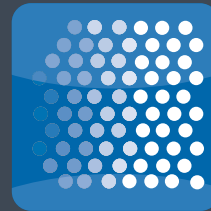
Moisture



Vibration



Temperature



Dust



Shock



Integrated total station  
radio available for  
Leica or Topcon

# TECHNICAL DATA



## Basic features:

- Rugged, waterproof outdoor computer with robust magnesium housing, passively cooled
- Protection class: IP 65, connector side IP 67
- Free programmable numeric keypad
- Integrated feet for tabletop (fold-out)
- Carrying handle with integrated pen holder
- Standardised mounting according to VESA100, e.g. suitable for table, wall, vehicle or swivel arm mounting
- Kensington lock
- Dimensions: 296 x 38 x 240 mm (11.654 x 1.496 x 9.449 in)
- Weight: approx. 2.1 kg (4.63 lb)

## Display:

- Unique 10.4" colour TFT reflective display, 1024 x 768 pixels (XGA), easy to read even under direct sunlight
- Protection glass cover with special hardening and high-quality anti-glare feature
- Switchable lighting, adjustable via software
- Active pen operation, without display contact

## Processor module:

- Power-efficient CPU Intel® Core™ 2 Duo U7500 ULV, 2 x 1.06 GHz
- 512 MB DDR2-SDRAM, 2MB L2 cache, 533 MHz FSB (larger RAM available, max. 2 GB)
- Intel® 82562 10/100 Mbit Ethernet controller
- Intel® Graphics Media Accelerator 950
- Power management: ACPI 3.0
- Integrated, sound-optimised stereo audio system

## Performance values:

- Highly reliable 2.5" hard disk (S-ATA) with 250 GB capacity (larger hard disks available), embedded in a shock resistant way  
Optional mass storage devices for high-level data security: Solid-State-Disk (SSD), Automotive HD, "Free Fall" HD
- Efficient power management
  - Dynamic clock speed with Intel® SpeedStep technology
  - "Suspend To RAM" function (S3) for "sleep and wake" in seconds, executable via separate sleep key
- Powerful 2D/3D graphics with max. 224 MB VRAM (DVMT 3.0) and DirectX 9 support
- USB 2.0 (up to 480 Mbit/s) with 6 channels, 3 channels available as standard
- Waterproof integrated microphone located at the front

## Power supply:

- Intelligent double removable battery system (2 x 14.8 V / 2.55 Ah), high level of safety ensured by full encapsulation
- Battery replacement during operation (Hot Swap), provided a battery is available
- Five-stage LED capacity display integrated in the battery, even available while device in use (membrane keyboard with window in the battery compartment cover)
- Normal operating time: 5 to 6 hours (with two batteries)
- Battery management integrated in the operating system
- Warning tone upon reaching critical battery capacity, automatic shut-down if necessary
- Internal charging connection operable while device is running
- External charging dock available, operation is also possible via mains or car charger
- Charging time for each battery internal/external approx. 2.5 hrs; 80 % of the capacity is available after just 1 hr
- External DC connection (19 V), standard use with mains adapter (70 W for 100 to 240 VAC); a separate DC/DC converter is available for vehicle operation
- Operational indicator (blue LED), flashes in standby mode
- Operating control for display lighting (blue LED above the key)

## Interfaces:

All interfaces to IP 67 standard (watertight):

- COM port: 1 x serial
- USB ports:
  - 1 x external
  - 2 x internal, placed in the battery compartment left- and right-sided, externally accessible, user-definable use (right-sided one not suitable for radio)
- Network connection (Ethernet 10Base-T/100Base-TX)
- Antenna terminal: 2 x SMA (e. g. for option WLAN/Bluetooth/UMTS/DGPS)
- WLAN 802.11 b/g/n (draft), max. 300 Mbit/s, option, optimised range by external antenna(s), additional range improvement by use of two antennas (on demand)
- Bluetooth Class 1, option, optimised range by external antenna
- Other built-in options: UMTS, ZigBee, GPS, DGPS
- Optional: fully integrated total station radio (Leica, Topcon)
- Optional: fully integrated DGPS extension
- Universal ExpressCard interface with weather protection cap (screwing system); other weather protection cap for sticking out cards on demand
- Mini PCI Express: 2 x internal
- Bootable via network or USB

## Operating system:

- Microsoft® Windows® 7 Professional, by request available with installation of Microsoft® Windows® XP Tablet PC Edition 2005 (downgrade)
- Microsoft® Windows® 7 Ultimate Edition (option)
- Linux (installation by the customer or on their behalf, option)

# PACKAGES & EQUIPMENT

Choose between the basic packages colibri X7 protect "classic" and the power packages "premium" and "surveying" as well as attractive additional options and professional equipment.

## colibri X7 protect "classic"

- colibri X7
- 512 MB RAM
- Hard disk 250 GB
- Microsoft® Windows® 7 Professional, Windows® XP Tablet PC Edition 2005 available as a downgrade
- 1 battery
- Battery-free pen (IP 56)

## Extra equipment for colibri X7 protect "premium"

- 1024 MB RAM
- 2nd battery
- 1 charging dock with charger
- 2-point and 4-point shoulder strap
- USB adapter cable
- Network connection cable
- Hard-top case

## Extra equipment for colibri X7 protect "surveying"

- 2048 MB RAM
- 2nd battery
- 1 charging dock with charger
- 2-point and 4-point shoulder strap
- Total station or GPS connection cable
- "Best-range" bluetooth extension, fully integrated
- USB adapter cable
- Network connection cable
- Hard-top case

## Option: DGPS extension

**NEW**

- colibri X7 protect with DGPS
- Fully integrated (e. g. common power supply) with minimal additional weight
- Certified by Topcon
- Version 1: Differential GNSS extension (GPS/GLONASS); accuracy 30-50 cm with compact high-performance antenna to be attached to colibri
- Version 2: RTK-GNSS extension (GPS/GLONASS); accuracy about 1 cm with external rover pole antenna

## Option: Total station radio extension

- colibri X7 protect with total station radio
- Fully integrated (e. g. common power supply) with minimal additional weight
- Range up to 1,000 m
- Available for
  - Leica with RH1200 / TCPS27
  - Leica with RH15 / TCPS28
  - Topcon with GPT-9000A, or more recent generations

## Additional options

- "Best-range" wireless extension, fully integrated (WLAN)
- "Best-range" bluetooth extension, fully integrated
- UMTS, fully integrated; SIM card required
- Simple GPS with 3-5 m accuracy, fully integrated
- Memory expansion (1 GB or 2 GB)
- Optional hard drive for high-level data security (SSD, Automotive HD, HD with free-fall sensor technology)

## Equipment

- Spare battery
- External charging tray/charging device
- Docking station
- Car accessories: charger, power supply, mounting kit
- Bracket for field incl. ball coupling

## QUALITY MADE IN GERMANY

### Service & Support

If you decide to purchase a colibri, you have made the right decision. We consider it our obligation to prove that even after purchase. Regardless of whether you have a modification request, installation task or require an error analysis, we will not let you down. Flexible, fast, knowledgeable – only the manufacturer has these attributes. As a colibri customer you have a winning hand when it comes to servicing. "Made in Germany" is an understatement. "Developed, made and supported in Germany" is more appropriate. We provide all that is required for comprehensive and knowledgeable support. Our team is there for you without any ifs or buts. You can reach us at normal office hours without expensive service fees under telephone number +49 (0)5251 150-500 or via e-mail at [support@robust-pc.de](mailto:support@robust-pc.de).

### Warranty & Device check

Our products meet the highest standards of quality. Our customers are not only able to enjoy a 24-month manufacturer's warranty; there is also a possibility of extending the warranty for up to 60 months after the date of purchase. In addition to this, there is also the attractive possibility of a cost-effective device check as and when required. Subsequently we certify faultless operability. This is the best way to protect your investment and ensure the long life of your outdoor PC.

Perfect SSD data security  
with turbo access in Windows 7!



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