Vehicle Mounted Terminals
Industrial PC solutions for visualisation and operation in vehicles

ads tec

Industrial IT

Terminals for industrial applications – state-of-the-art technology in innovative design

In the harsh environmental conditions encountered in everyday industrial use, ADS-TEC Terminals work reliably on vehicles and forklifts as well as in agricultural and construction machinery. Technology 100% made in Germany.

Terminal HDT8000 series

Terminal VMT7000 series

Terminal VMT8000 series

Industrial IT platforms for warehouse and logistics Technology for Professionals

You can count on it. ADS-TEC has been providing up-to-date and powerful PC technology with an industry-orientated design for more than three decades. 100% depth of development and state of the art processes form the basis for customer-related products and individual solutions. Technology 100% made in Germany – a good feeling for ADS-TEC customers.

Terminals Added values
- Different screen sizes for different application areas
- Convenient operation via touch-screen and front keys
- IP65 protection against dust and water spray
- Extremely stable WLAN performance using three integrated antennas
- Powerful processor technology
- Many possible operating systems
- Outstanding design
- Everything from a single source: Even more options with the ADS-TEC software tools Big-LinX and X-Remote
- Added security with the ADS-TEC service packages

Terminals Areas of application
- Vehicle terminal for forklifts, agricultural machinery and construction machinery
- MDC / PDC / QA data collection in production
- For a wide variety of applications in storage and logistics

ADS-TEC Vehicle Mounted Terminals at a glance

VMT7000 series **Terminals with resistant industry touch-screen**
- 8" Wide, 10.4", 12.1", 15.0" display
- Intel Atom® Dual Core / Quad Core
- Resistant 5 wire touch-screen
- Bluetooth connectivity
- IP65 all-round protection

VMT8000 series **Terminals with multi-touch-technology**
- 8" Wide, 10.4", 12.1", 15.0" display
- Intel Atom® Dual Core / Quad Core
- PCAP multi-touch
- Bluetooth connectivity
- IP65 all-round protection
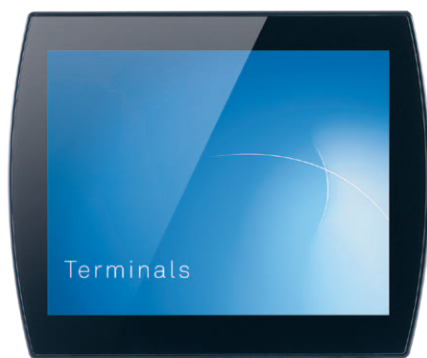
HDT8000 series **Terminals for use in agricultural and construction machinery**
- 12.1" display
- Intel Atom® Dual Core / Quad Core
- PCAP multi-touch
- IP65 all-round protection

VMT7000 and VMT8000 Series Product Benefits

Tried-and-tested deployment umpteen thousands of times **For your individual logistics application**

The robust vehicle terminals of the VMT7000 and VMT8000 series are specially designed for demanding industrial environments and are even resistant to extreme loads. The right choice if you are looking for a reliable solution for your logistics application.

VMT7000 series **Further improvement of successful technology**
- Display sizes in 8" Wide, 10.4", 12.1", 15.0"
- Resistant 5 wire touch-screen
- High quality LED backlight industrial displays
- Can be operated wearing gloves
- Intel Atom® E3827 Dual Core, E3845 Quad Core
- Integrated WLAN, LTE, GPS, RFID and Bluetooth
- Wide variety of interfaces on the rear of the device beneath a cover
- Front USB
- Fan-free operation
- Temperature range -30 to +55 °C
- IP65 all-round protection against dust and water spray

VMT8000 series **High-quality design and state-of-the-art technology**
- Display sizes in 8" Wide, 10.4", 12.1", 15.0"
- PCAP multi-touch for multi-finger operation
- Low-reflection surface for optimum view
- Scratch resistant and shatterproof front
- High quality LED backlight industrial displays
- Intel Atom® E3827 Dual Core, E3845 Quad Core
- Integrated WLAN, RFID and Bluetooth
- Wide variety of interfaces on the rear of the device beneath a cover
- Front USB
- Fan-free operation
- Temperature range of -30 to +55 °C
- IP65 all-round protection against dust and water spray

reddot design award
winner 2013

HIGHLIGHTS

→ **Extended antenna concept with a third WLAN antenna increases the stability of connections**
→ **Intel Atom® processor E3845 Quad Core**
→ **Windows® 10 IoT Enterprise**

Fast and efficient **Thanks to the latest Intel® technology**
- Current Intel Atom® processor technology
- Increased processing power with low power consumption
- Fan-free operation

Robust and cable-free **Extended antenna concept**
- Extended antenna concept thanks to a third WLAN antenna for 3 x 3n – increased stability of the connections, even in harsh industrial environments
- a/b/g/n WLAN module with Diversity function for optimum reception
- External connection for an additional antenna
- Internal antennas – protected against theft and damage

Flexible operation **The latest multi-touch technology**
(for VMT8000 series)
- Multi-finger operation using PCAP multi-touch
- Simple and intuitive: drag, swipe, rotate, zoom
- Convenient operation on vehicles and forklifts

VMT7000 and VMT8000 Series
Product Benefits

Soft keyboard **Data input made easy**
- The soft keyboard is available as soon as the login screen appears
- Switchover between full keyboard and optimised display for terminal emulations
- Size and content of the keyboard can be adapted easily to the respective application and specific requirements; both the numeric keypad and the alphanumeric keyboard can be displayed separately or can be combined
- Setting last used is saved automatically when the soft keyboard is closed
- Depending on the operating system, various languages and the appropriate keyboard layouts can be selected
- Colour scheme and transparent mode can also be configured
- API interface for controlling the keyboard from the customer application

RFID identification **Simple and safe**
- RFID reader for user identification
- Integrated RFID modules
- Various transponder solutions for personal identification
- Available in 2 variants: RFID units Legic® and Mifare®

Front keys **Simply ideal**
- Call-up of the soft keyboard
- Task change
- Right mouse-key
- Fn key for adjusting display brightness and volume
- Possibility of customised front key assignment

Front USB **Simply practical**
- For service purposes or for connecting external peripherals
- Can be disabled separately using a software-controlled USB lock

Ignition function on vehicles An ingenious idea

- Switch-on using ignition voltage
- The system is disabled when the ignition key is removed
- Automatic shut-down of the terminal after a configurable period of time
- Safety when leaving the vehicle
- Fast continuation of work following interruption

Power leads For mobile or stationary use

- Terminals with 24 VDC power adapter or possibly 48 VDC variant
- Mobile and stationary – quick and easy connection to the respective power supply
- Terminal automatically switches to a »soft-off state« if it remains unused for a long period of time
- Voltage fluctuations at the vehicle are balanced out

Connections and interfaces Securely connected

- Strain relief for all cables
- Interfaces well-protected according to IP65 by a cover and secure cable gland

Brackets Sturdy from the base up
Various brackets are available to allow installation at different operation locations.

Bracket for table or vehicle mounting
- Mounting adapter for mounting on tables or vehicles

Mounting bracket left/right
- Mounting bracket for attachment to tables, to vehicles or to the wall

Bracket for table mounting incl. 230 V power adapter
- Mounting adapter for attaching to tables incl. table power adapter on the bracket

Bracket for VESA 75 standard
- Mounting adapter for VESA 75 compatible wall brackets and support arms

Housing for VESA 75 attachment
- Direct mounting on support arm systems as well as machines and systems

For other bracket variants, please visit:
www.ads-tec.de/terminals

The HDT8012 from ADS-TEC For agricultural and construction machinery

The ADS-TEC HDT8012 has been specially developed for use in agricultural and construction machinery. It is exceptionally robust and copes with the high demands of these areas without problems. Due to its compact design, it will find its place in even the smallest of cabs.

HDT8000 series Added values

- Large display with a compact design
- Convenient operation with multi-touch
- Vehicle-specific adaption of the connections
- Powerful processor technology
- Different operating systems
- High quality and outstanding design
- Everything from a single source: Even more options with the ADS-TEC software tools Big-LinX and X-Remote
- Increased security with ADS-TEC service packages

HDT8000 series Areas of application

- Operating device for construction machinery – from mini excavators to telescopic cranes
- Terminal for agricultural vehicles such as tractors or harvesters
- For visualisation, monitoring, control and operating

HDT8000 Series – Heavy duty terminals for use in agricultural and construction machinery

HDT8000 series **High-quality design and new technology**
- Fan-free with Intel Atom® processors
- 12.1" TFT display
- IP65-all-round protection against dust and water spray
- Integrated WLAN module 802.11 (a/b/g/n) for optimum reception
- Practical stainless steel brackets with variable tilt angles for agricultural or construction machinery

Ignition function **A sparkling idea**
- Depending on the ignition voltage, the terminal can be switched on and off according to a parameterised interval
- Safety when leaving the vehicle
- Fast continuation of work following interruption
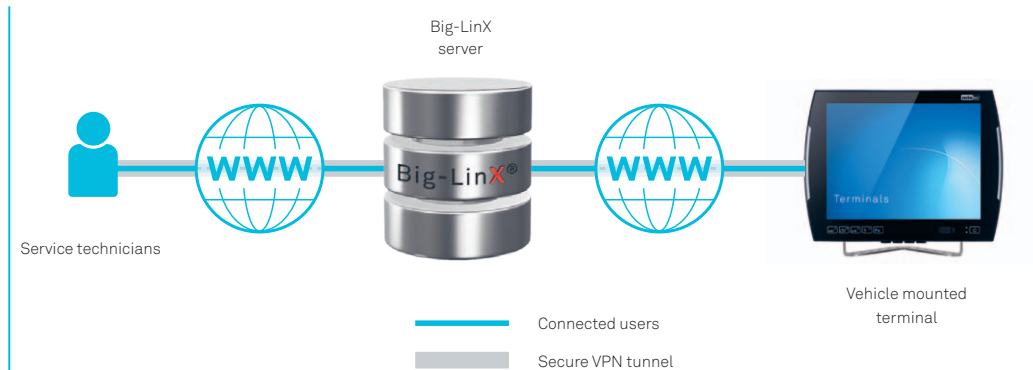

Interfaces **Communication made easy**
- Screw-mounted service access on the rear with rubberised cable glands to protect the interfaces
- Vehicle-specific adaptation of the connections on the rear of the device possible
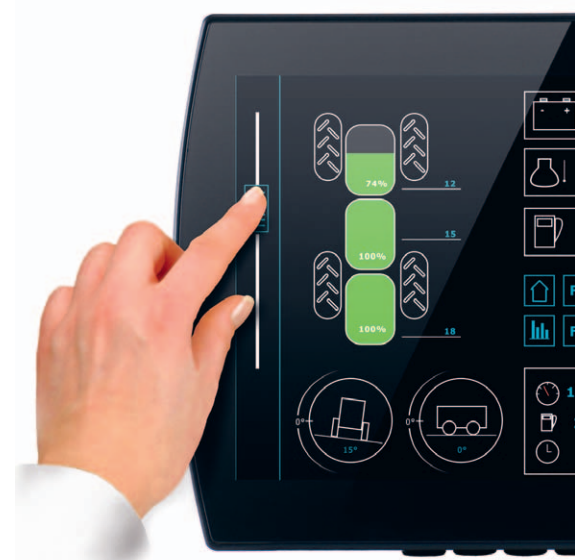
Flexible operation **The latest multi-touch technology**
- Multi-finger operation using PCAP multi-touch
- Operation with fingers, gloves or special styluses
- Simple and intuitive: drag, swipe, rotate, zoom
- Convenient operating of agricultural and construction machinery

Terminals even better with ADS-TEC software tools

Big-LinX server

Service technicians

Vehicle mounted terminal

— Connected users

— Secure VPN tunnel

Secure connection in the event that service should be necessary With the ADS-TEC Big-LinX® remote management client

With the Windows-based client, always stay securely connected to ensure smooth operation of the vehicle mounted terminals.
- Secure connection by means of Smartcard-secured VPN tunnel
- Software, firmware and BIOS are always kept up-to-date via the connection to the ADS-TEC Iot service platform Big-LinX

With Big-LinX, a central platform is available to technicians or service groups for remote maintenance of any number of terminals.
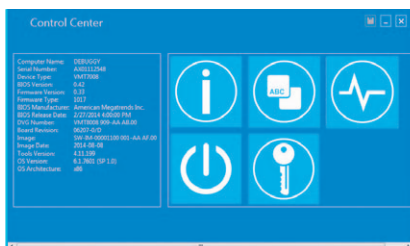
Configuration Center Customised settings quick and easy
- USB lock to protect against unauthorised access
- Soft keyboard configuration options
- Front panel keys for customer-specific assignment

IGEL Linux Thin Client An extremely stable Thin Client OS

Your advantages at a glance
- Low acquisition and operating costs
- Low system requirements
- Future-proof due to regular, free firmware updates from IGEL (myigel.biz)
- High security because malware for IGEL Linux is few and far between
- Supports the leading server, peripheral and security solutions
- Comprehensive and secure remote management

X-Remote®

X-Remote® Duplication and remote operation of PC desktops via local networks and the Internet

Your advantages at a glance
- Direct real-time control and operation of distributed systems and processes with the ADS-TEC remote control software »X-Remote«.
- Windows®-based PC monitor surfaces, including the operation thereof, can be duplicated and dynamically adapted to display screen resolutions.
- Simple construction of a monitoring centre in a network in which multiple remote desktops can be displayed on one screen and operated if necessary.
- X-Remote can even be set up on mobile terminals and then monitor and control powerful computers - even via WLAN.

ADS-TEC Service – more security

ADS-TEC service packages **Extended Warranty in Basic, Silver and Gold or comprehensive protection with »Full Comprehensive Coverage FCC«**

In order to cover technical malfunctions it is possible, beyond the statutory warranty, to purchase an ADS-TEC industrial IT product for an extended service. In this way, it is possible to have longer-term protection against repair costs due to technical malfunctions.

	without service package	BASIC adstec Service	SILVER adstec Service	GOLD adstec Service
Protection against technical malfunctions	– *	✓	✓	✓
Contract term	– *	36/60 months	36/60 months	36/60 months
Processing time for the industrial IT products in event of service	20 AT	10 AT	5 AT	3 AT
Protection against mechanical damages	– *	–	–	–

ADS-TEC Services **Overview of the packages**
With the Basic, Silver and Gold packages, defined reaction times during 36 or 60 months can be specified for the repair, in order to keep the downtime as short as possible. These are calculated in working days (AT) from arrival of the Service Article at ADS-TEC until once again returned to the transport provider after successful repair, exclusive of any possible period subject to a cost estimate (for a repair outside of the guarantee service).

	without service package	FCC adstec Service
Repair costs are accepted, even in the event of mechanical damage	– *	✓

ADS-TEC Services **Comprehensive protection »Full Comprehensive Coverage FCC«**
»Comprehensive Coverage« is the service which is comparable to fully comprehensive insurance for industrial computing products, which also takes effect in the event of sudden and externally-caused defects such as damage caused by a fall or the mechanical destruction of a touch-screen. All repair costs are covered.

ADS-TEC Services **Services & customising made to measure**
Tailored to your requirements, we provide other services such as the planning and implementation of roll-outs or the customising of operating systems and applications such as soft keyboards and RFID. Our made-to-measure service, support and maintenance agreements also ensure that you have the best possible support over the entire service life.

*only contractually agreed warranty

VMT7000 Series Technical Data

Device data

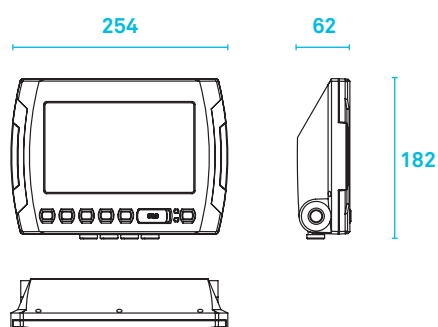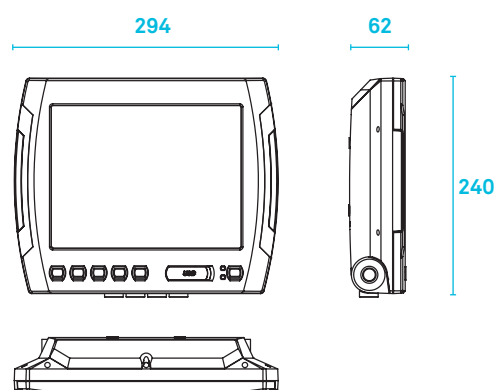|		VMT7008	VMT7010	VMT7012	VMT7015
Housing		Diecast aluminium, powder-coated			
Front panel		Glass-fibre reinforced plastic, painted			
Display	LED backlight Resolution Optional Display colours	8" TFT 800 x 480 pixels max. 16.2 million	10.4" TFT 1024 x 768 pixels max. 16.2 million	12.1" TFT 800 x 600 pixels 1024 x 768 pixels max. 16.2 million	15.0" TFT 1024 x 768 pixels max. 16.2 million
		Automatic or manual brightness adjustment of the display Optional: Sunlight-readable (VMT7010 only)			
Touch		Resistive industrial touch-screen			
Processor		Intel Atom® N2600 1,6 GHz (Dual Core)			
		-	Intel Atom® E3827 1.75 GHz (Dual Core) Intel Atom® E3845 1.91 GHz (Quad Core)		
RAM		4 GB DDR3			
		-	8 GB DDR3		
Mass storage		mSATA 16, 32, 64, 128 GB			
Interfaces		COM 1 (RS232, 5 V supply can be switched in) 1 x USB 2.0 on front panel 3 x USB 2.0 (All external USB interfaces in high-current design up to 1A) Optional: COM2 (RS232, RS485 or CAN)			
Network		2 x 1 Gbit/s Ethernet RJ45			
Sound		Sound output via two internal speakers			
Wireless		Optional: Integrated WLAN module 802.11 (a/b/g/n) with 3 WLAN antennas for 3 x 3n Optional: Connection for an external antenna (RP-SMA female connector in service slot)			
		-	WWAN and GPS, connection for an external antenna (via SMA female)		-
RFID		-	Optional: Mifare® reader 13.56 MHz for ISO 14443 A Mifare® Class and Mifare® PRO cards Legic® prime reader		
Bluetooth		-	Optional: 2.0 Class 1 / Class 2		
Power adapter		24 VDC (10 – 36 VDC)			
		-	Optional: 48 VDC (18 – 60 VDC)		
Operating system		Windows® Standard 7 MUI Windows® 7 Ultimate FES MUI			
		-	Windows® 10 IoT Enterprise IGEL Linux		
Protection class		IP65			
Operating temperature		-20 °C to +55 °C (depending on mass storage device)			
		-	Optional: -30 °C to +55 °C (depending on mass storage device)		
Warehouse temperature		-40 °C to +80 °C			
Dimensions (W x H x D)		254 x 182 x 62 mm	294 x 240 x 62 mm	338 x 261 x 62 mm	400 x 305 x 65 mm
Weight		Approx. 2.1 kg	Approx. 2.9 kg	Approx. 3.3 kg	Approx. 4.3 kg
Vibration and shock resistance		EN 60721-3-5, class 5M2 with HDD equipment, class 5M3 (terrestrial vehicles) with SSD equipment, 5 hours of noise-type vibrations; 3.6 g rms and 30 g peak value MIL-STD 810F Annex C. Figure 514.5C (US Highway Truck Transportation)			
Humidity		10 to 85% non-condensing			

Accessories

Brackets Various mounting adapters for different applications are optionally available
Keyboard holders Keyboard holders in various sizes are optionally available for external keyboards
Power adapter Table power adapter 230 VAC at 24 VDC
Connecting cables Cable kit for connection to forklifts
Antenna External antenna with magnetic base

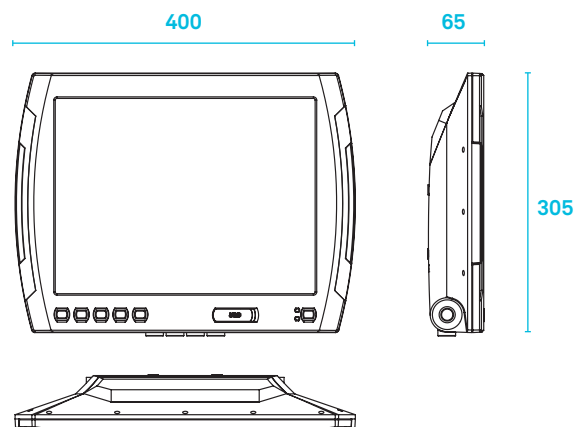An overview of all accessories can be found at: **www.ads-tec.de/terminals**

254 62 182

VMT7008

294 62 240

VMT7010

338 62 261

VMT7012

400 65 305

VMT7015

VMT8000 Series Technical Data

Device data

		VMT8008	VMT8010	VMT8012	VMT8015
Housing		Diecast aluminium, powder-coated			
Front panel		3 mm glass panel, toughened and anti-reflective			
Display	LED backlight Resolution Optional Display colours	8" TFT 800 x 480 pixels max. 16.2 million	10.4" TFT 1024 x 768 pixels max. 16.2 million	12.1" TFT 800 x 600 pixels 1024 x 768 pixels max. 16.2 million	15.0" TFT 1024 x 768 pixels max. 16.2 million
		Automatic or manual brightness adjustment of the display			
Touch		PCAP multi-touch			
Processor		Intel Atom® N2600 1.6 GHz (Dual Core)	Intel Atom® E3827 1.75 GHz (Dual Core) Intel Atom® E3845 1.91 GHz (Quad Core)		
RAM		4 GB DDR3			
		-	8 GB DDR3		
Mass storage		mSATA 16, 32, 64, 128 GB			
Interfaces		COM 1 (RS232, 5 V supply can be switched in for scanners) 1 x USB 2.0 on front panel 3 x USB 2.0 (All external USB interfaces in high-current design up to 1 A) Optional: COM2 (RS232, RS485 or CAN)			
Network		2 x 1 Gbit/s Ethernet RJ45			
Sound		Sound output via two internal speakers			
Wireless		Optional: Integrated WLAN module 802.11 (a/b/g/n) with 3 WLAN antennas for 3 x 3n Optional: Connection for an external antenna (RP-SMA female connector in service slot)			
RFID		-	Optional: Mifare® reader 13.56 MHz for ISO 14443 A Mifare® Class and Mifare® PRO cards Legic® prime reader		
Bluetooth		-	Optional: 2.0 Class 1 / Class 2		
Power adapter		24 VDC (10 – 36 VDC)			
		-	Optional: 48 VDC (18 – 60 VDC)		
Operating system		Windows® Standard 7 MUI Windows® 7 Ultimate FES MUI			
		-	Windows® 10 IoT Enterprise IGEL Linux		
Protection class		IP65			
Operating temperature		-20 °C to +55 °C (depending on mass storage device)			
		-	Optional: -30 °C to +55 °C (depending on mass storage device)		
Warehouse temperature		-40 °C to +80 °C			
Dimensions (W x H x D)		259 x 187 x 60 mm	299 x 246 x 60 mm	344 x 266 x 57 mm	405 x 310 x 61 mm
Weight		Approx. 2.2 kg	Approx. 3.1 kg	Approx. 3.5 kg	Approx. 4.5 kg
Vibration and shock resistance		EN 60721-3-5, class 5M2 with HDD equipment, class 5M3 (terrestrial vehicles) with SSD equipment, 5 hours of noise-type vibrations; 3.6 g rms and 30 g peak value MIL-STD 810F Annex C. Figure 514.5C (US Highway Truck Transportation)			
Humidity		10 to 85% non-condensing			

Accessories

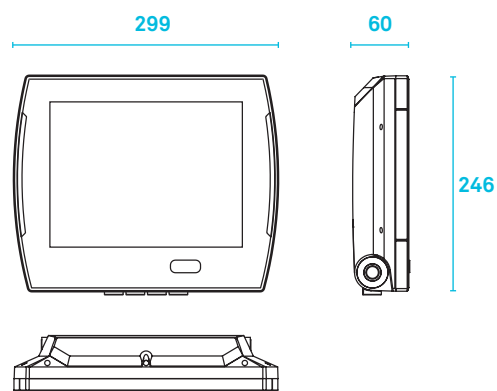|	
Brackets	Various mounting adapters for different applications are optionally available
Keyboard holders	Keyboard holders in various sizes are optionally available for external keyboards
Power adapter	Table power adapter 230 VAC at 24 VDC
Connecting cables	Cable kit for connection to forklifts
Antenna	External antenna with magnetic base

An overview of all accessories can be found at: **www.ads-tec.de/terminals**
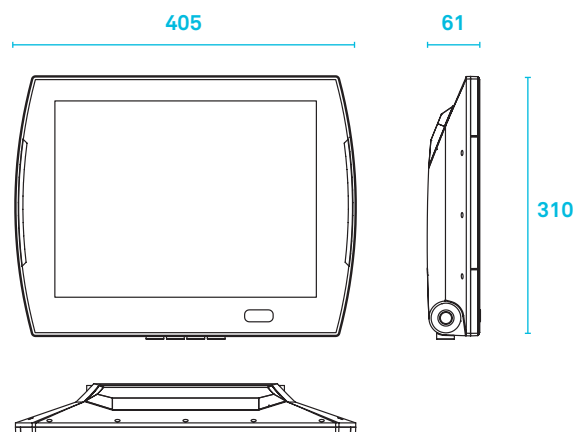
259   60   187

VMT8008

299   60   246

VMT8010

344   57   266

VMT8012

405   61   310

VMT8015

HDT8000 Series Technical Data

Device data

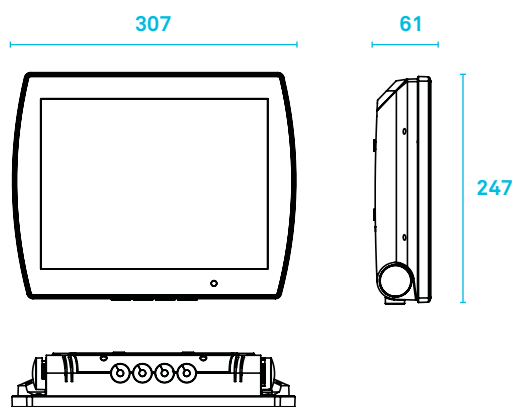|	HDT8012
Housing	Diecast aluminium, powder-coated
Front panel	3 mm glass panel, toughened and anti-reflective
Display	12.1" TFT LED backlight Resolution 1024 x 768 Pixel Display colours max. 16.2 million
Touch	PCAP Multi-Touch
Processor	Intel Atom® E3827 1.75 GHz (Dual Core) Intel Atom® E3845 1.91 GHz (Quad Core)
RAM	4 GB DDR3 8 GB DDR3
Mass storage	mSATA 16, 32, 64, 128 GB
Interfaces	COM 1 (RS232, 5 V supply can be switched in) 3 x USB 2.0 (All external USB interfaces in high-current design up to 1A) Optional: COM2 (RS232, RS485 or CAN), Optional: Connections on the back of the device can be adapted to the vehicle
Network	2 x 1 Gbit/s Ethernet RJ45
Sound	Sound output via two internal speakers
Wireless	WLAN module 802.11 a/b/g/n
Power adapter	24 VDC (10 – 36 VDC)
Operating system	Windows® 7 Windows® 7 Ultimate FES MUI Windows® 10 IoT Enterprise
Protection class	IP65
Operating temperature	-20 °C to +55 °C
Warehouse temperature	-40 °C to +80 °C
Dimensions (W x H x D)	307 x 247 x 61 mm
Weight	Approx. 3.0 kg
Vibration and shock resistance	EN 60721-3-5, class 5M2 with HDD equipment, class 5M3 (terrestrial vehicles) with SSD equipment, 5 hours of noise-type vibrations; 3.6 g rms and 30 g peak value MIL-STD 810F Annex C. Figure 514.5C (US Highway Truck Transportation)
Humidity	10 to 85% non-condensing

Accessories

Brackets   Various mounting adapters for different applications are optionally available
Keyboard holders   Keyboard holders in various sizes are optionally available for external keyboards
Antenna   External antenna with magnetic base

An overview of all accessories can be found at: **www.ads-tec.de/terminals**

307

61

247

HDT8012

Company headquarters (above) in Nürtingen near Stuttgart, production site in Wilsdruff near Dresden

ads-tec GmbH **A strong partner**
- Products from ADS-TEC have been developed in-house for over 35 years
- 100% depth of development is the basis for long-term and individual solutions
- Services: concept, excellent design, development, fabrication and long-term support
- Modern processes for development, supply chain management, production and service
- References and applications: e.g., automation, logistics, medicine and the construction equipment industry as well as network operators, energy suppliers and public utilities
- International certifications for IT products and battery storage
- In-house laboratory and testing facilities
- Highest safety standards
- Leading technology and current technological standards
- Permanent technology transfer in cooperation with universities
- Intel® Technology Provider Platinum Partner and member of the Intel® Internet of Things Solutions Alliance
- Involvement in networks and associations
- Numerous ADS-TEC research projects funded by federal and state governments

Technology 100% made in Germany

(intel®) | Technology Provider
Platinum 2018

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TECHNOLOGY
MADE IN GERMANY

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Industrial IT