Machine Mounted Terminal

Machine Mounted Terminal

Machine Mounted Terminals and Displays

Stainless steel operating devices for use in the food, beverage, pharmaceutical and chemical industries

adstec

Industrial IT

Fully enclosed stainless steel housing without screws or edges Optimised for strict hygiene requirements, the current Terminals and Displays from ADS-TEC ensure reliable and efficient machine and system control. Technology 100% made in Germany.

Terminal MMT / MMD8024

Terminal MMT / MMD8017

Machine Mounted Terminal

Industrial IT platforms in the hygiene environment   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 almost four 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.

MMT/MMD8000 series Added values

- Easy-to-clean surfaces made of glass and stainless steel, without screws or edges
- Fully enclosed and resistant to dust and water
- Operating temperatures from 0 to +45 °C / +50 °C
- Reliable use and long term availability
- Outstanding design upgrades your system
- 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
- Also available alternatively with new VESA adapter in IP69K

MMT/MMD8000 series Areas of application

Operating platforms for your software to ensure optimum documentation, seamless traceability and quality assurance for the production of foods, beverages, pharmaceutical and chemical products

- Machine controllers
- System monitoring
- Visualisation of process information
- Operating platform for serialisation in the pharmaceutical industry

ADS-TEC Machine Mounted Terminals and Displays at a glance

MMT8000 series **Terminals**

The integrated IPC solution for your
production processes
- 17.3" and 23.8" Full HD display
- Intel® Celeron® 1.6 GHz or
  Core™ i5 1.9 GHz processors
- Fully enclosed stainless steel housing
- IP65 protection against dust and water spray
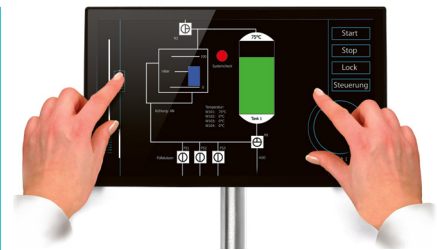

MMD8000 series **Displays**

The digital monitor solution for
your existing industrial PC environment
- 17.3" and 23.8" Full HD display
- HDBaseT™, situated up to 100m away
- Fully enclosed stainless steel housing
- IP65 protection against dust and water spray

MMT/MMD8000 Series Product Benefits

For your process environments with exacting demands on hygiene and cleanliness
Efficient and clean production at all times Branches like the food, beverage or pharmaceutical industries are subject to the strictest hygiene requirements. Here, the slimline, fully enclosed stainless steel housings of the ADS-TEC Terminals and Displays are the efficient and reliable basis for the control and visualisation of production processes. The award-winning design rounds off the functionality of the MMT/MMD8000 series and provides crucial benefits in the application.

Simple and intuitive The latest multi-touch technology
- Capacitive multi-touch display for comfortable operation
- Operation with gloves is possible
- Anti-reflective front panel

Robust technology Slimline design
- Fully enclosed stainless steel housing
- Surfaces in glass and stainless steel for optimum cleaning of the device
- Hygienic design without screws and edges on the rear side
- Fanless design
- Chemically toughened front panel
- Optimised heat dissipation through integrated heat pipes
- Implementation of the latest technological standards: Sandwich housing technology consisting of stainless steel and aluminium layers
- Award-winning design for highest demands

HIGH LIGHTS

→ **Fully enclosed stainless steel housing without screws or edges**
→ **Flexible mounting options**
→ **The latest multi-touch technology**
→ **Windows® 10 IoT Enterprise**
→ **Integrated Wi-Fi module IEEE 802.11 ac/a/b/g/n as an option**

Support arm

VESA adaption

VESA adaption IP69K

Installation made easy **Flexible rotation and tilting**

• For 48mm support arm systems
• Rotatable and tiltable mounting adapter
• Stand or support arm mounting possible
• Concealed cable routing through support arm system and mounting adapter
• Compact and outstanding design

MMT/MMD8000 Series Product Benefits

Easy to clean **Optimised for hygienic areas**
- Use of commercially available cleansing material
  for the pharmaceutical, food and beverage sectors
- Easy to wipe off and clean
- Avoids dirt and bacteria because of
  its screwless design without joints and edges
- IP65 protection against dust and water spray
- Protected interfaces and concealed cable routing

Approvals **MMT/MMD**
- UL listed for USA and Canada
  (UL 61010-1, UL 61010-2-201)
- CCIC confirmation letter for China
- CE for Europe

Comfortable display sizes **For extensive
system and process visualisation**
- 17.3" and 23.8"
- Full HD 1920 x 1080 pixels
- Bright display with a wide viewing angle
- Clearly structured visualisation and control
  of machines and systems

Machine Mounted Terminal

Machine Mounted Terminal

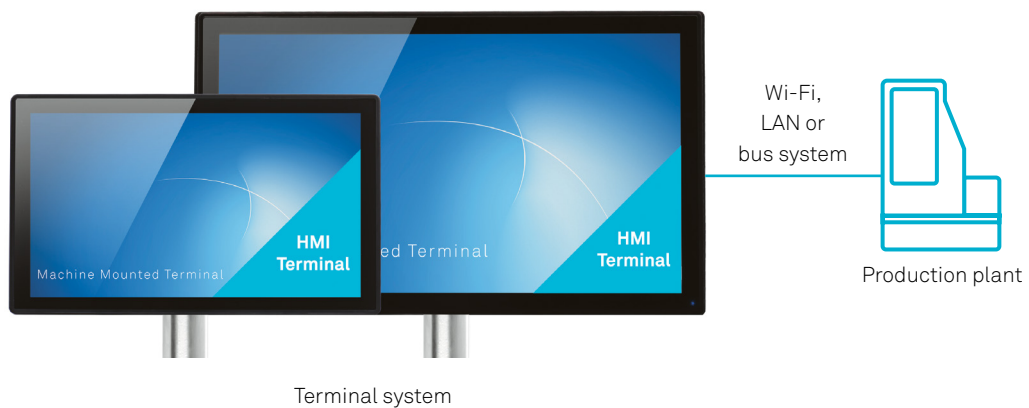**Tried and tested machine operation**
Functions via pushbutton
- Up to 7 freely programmable 22.5mm
  pushbutton elements
- PC and control panel can be installed
  and removed separately from each other
- Cable routing through support arm
  and adapter
- Standard version or customer-specific
  variants of machines and systems

MMT Machine Mounted Terminals

MMT Machine Mounted Terminals **The integrated IPC solution for your production processes**
The IP65 compliant operating terminals with integrated processor unit are the first fan-free industrial PCs of this performance class available in a compact design. The very latest multi-touch technologies provide the ideal platform for modern visualisation of the highest standard.

Wi-Fi,
LAN or
bus system

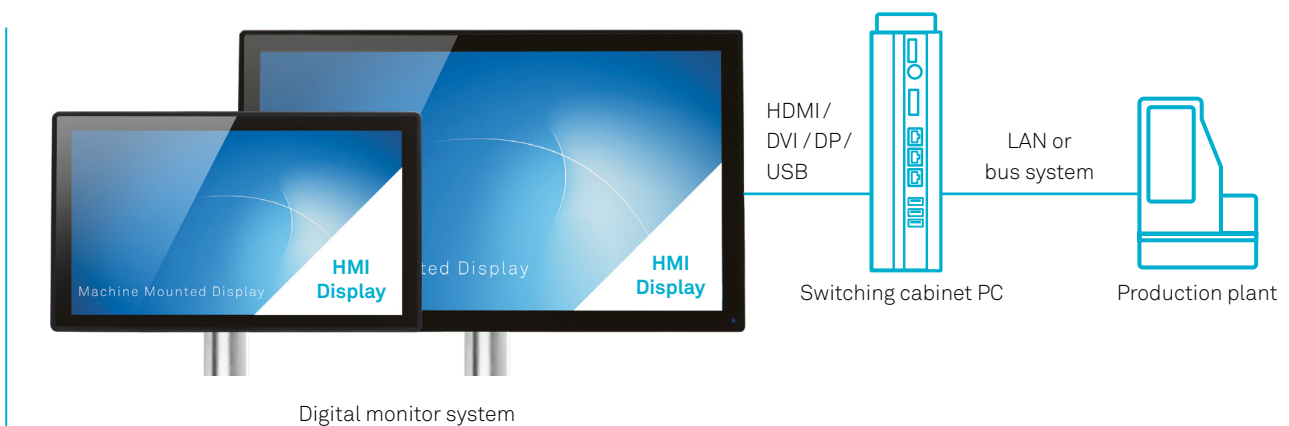Production plant

Terminal system

Powerful Intel® processor technology
Supports modern operating systems
• Either Intel® Celeron® 1.6 GHz or
  Intel® Core™ i5 1.9 GHz processors
• Passive cooling using heat pipe technology

24 VDC

CMOS battery

SD card slot
SIM card

2 x RJ45 Gigabit

2 x USB 3.0
1 x USB 2.0

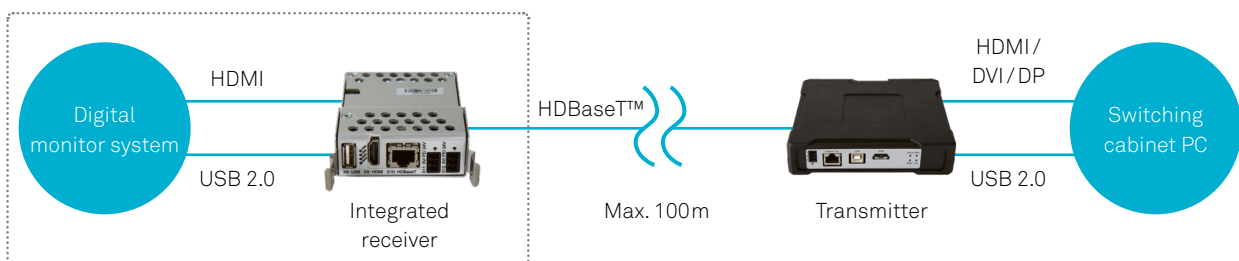# MMD Machine Mounted Displays

MMD Machine Mounted Displays **The digital monitor solution for connection of your existing industrial PC environment**

The pure monitor solutions of the MMD8000 series have the same design and housing as the complete computer solution of the Machine Mounted Terminals. High transmission rates of the display signals provide maximum flexibility for the easy connection of your existing switching cabinet PC or central computer.

HDMI / DVI / DP / USB

LAN or bus system

Machine Mounted Display

HMI Display

ted Display

HMI Display

Switching cabinet PC

Production plant

Digital monitor system

Digital monitor system **Cabled connection of your existing application**
- HDMI/DP display input for connection of your computer environment
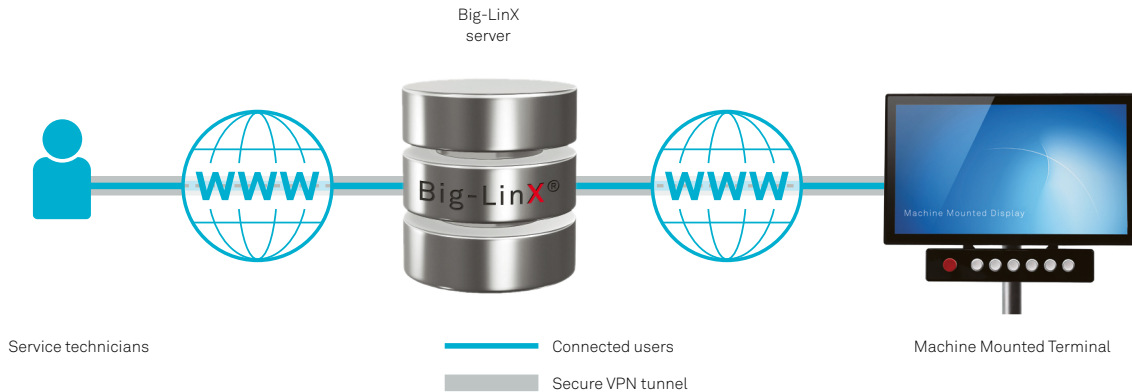- Connection of commonly used USB peripherals via the USB 2.0 port

Digital monitor system

HDMI

USB 2.0

Integrated receiver

HDBaseT™

Max. 100m

Transmitter

HDMI / DVI / DP

USB 2.0

Switching cabinet PC

HDBaseT™ Extender Kit **The additional option for longer distances**
Bridge distances between computer and monitor of up to 100m by extending with the HDBaseT™ Extender Kit
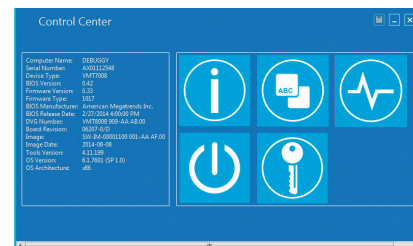- Extender Kit consisting of receiver module for installation in the MMD and transmitter module for installation in the switch cabinet

Machine Mounted Terminals even better with ADS-TEC software tools

Big-LinX server

Service technicians

Connected users

Secure VPN tunnel

Machine Mounted Terminal

Big LinX® IIoT Client **Secure connection for servicing**
- VPN tunnel secured via smartcard (optional software certificate also available)
- Includes X-Remote for secure remote desktop connection
- Configurable and secure data push for provision and visualisation of remote maintenance or other big data applications
- Keep software, firmware and BIOS always up-to-date on your devices
With Big-LinX, a central platform for remote maintenance of any number of terminals is available for technicians or service groups.

Configuration Center **Customised settings quick and easy**
- USB lock to protect against unauthorised access
- Soft keyboard configuration facility

IGEL Linux **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 also be set up on mobile terminals for operation and monitoring – even via Wi-Fi

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.
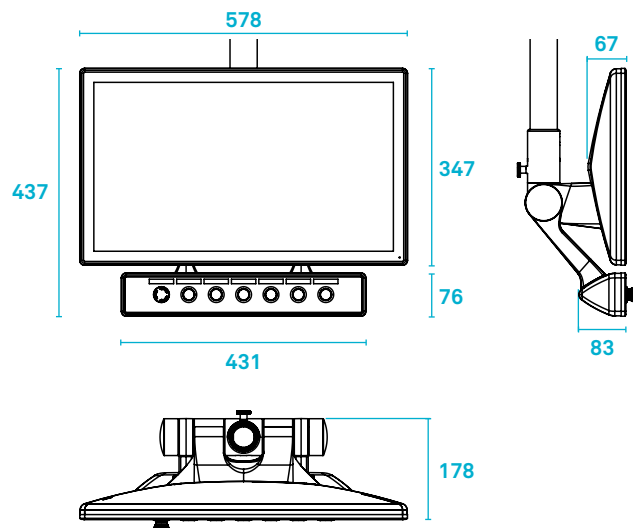
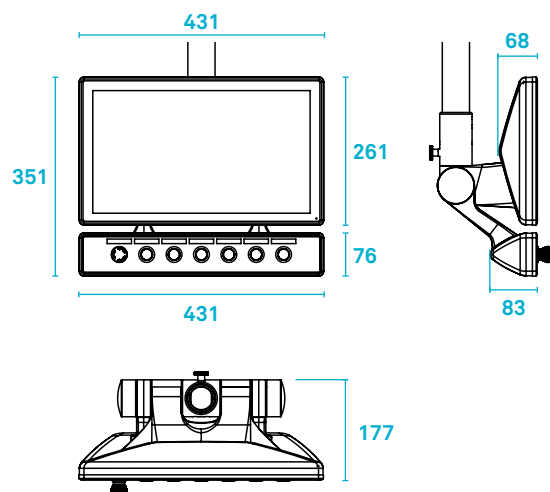*****warranty period of 12 or 24 months

MMT / MMD Technical Data

Device data

	MMT8017	MMT8024	MMD8017	MMD8024
Housing	Fully enclosed stainless steel housing			
Display Resolution	17.3" LED backlight 1920 x 1080 pixels	23.8"LED backlight 1920 x 1080 pixels	17.3" LED backlight 1920 x 1080 pixels	23.8"LED backlight 1920 x 1080 pixels
Touch	PCAP multi-touch / toughened glass			
Processor	Intel® Celeron™ 1.6 GHz (2980U) Intel® Core™ i5 1.9 GHz (4300U)		-	
RAM	Up to 8 GB DDR3		-	
Mass storage	SSD to 500 GB mSATA SSD to 128 GB		-	
Network	2 x 1 Gbit/s Ethernet RJ45		-	
Interfaces	1 x USB 2.0, 2 x USB 3.0 (1 x optional accessible from the outside)		3 x USB 2.0 (1 x optional from the outside) 1 x USB slave 1 x HDMI, 1 x DisplayPort	
Wireless	Optional: Integrated Wi-Fi module IEEE 802.11 ac/a/b/g/n			
Power adapter	24 VDC (tolerance 18 - 30 VDC)			
Operating system (64 bit)	Windows® 10 IoT		-	
Protection class	IP65 (not verified by UL, tested by ads-tec Industrial IT GmbH)			
Operating temperature	0 °C to +50 °C	0 °C to +45 °C	0 °C to +50 °C	0 °C to +45 °C
Dimensions (W x H x D) **(without key module)**	431 x 261 x 68 mm	578 x 347 x 67 mm	431 x 261 x 68 mm	578 x 347 x 67 mm
Weight (without key module)	Approx. 5 kg	Approx. 7.5 kg	Approx. 5 kg	Approx. 7.5 kg
Vibration resistance	DIN EN 60068-2-6			
Shock resistance	DIN EN 60068-2-27			
Humidity	10 to 85% non-condensing			

MMT8024 / MMD8024

578

437

347

76

431

67

83

178

MMT8017 / MMD8017

431

351

261

76

431

68

83

177

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

The ADS-TEC Group Technology for Professionals

For decades, we follow the latest technologies for the best benefit of our customers. Depth of development and process „Made in Germany" distinguish us, so that we remain able of acting over long periods of time. On this basis we are a strong and reliable partner in the fields of "Industrial IT" and "Energy".

Added values For the success of our customers

- Our products have been developed in-house for over 35 years
- 100% depth of development as basis for long-term and individual solutions
- Tailor-made solutions based on tried-and-tested standard products
- Cloud-based IIoT solution kit for Industry 4.0 applications
- Highest safety standards for worldwide data communication
- Roll-out, asset and solution management services
- References and applications in areas like automation, logistics, medical technology, food and beverage as well as agricultural and construction machinery
- Extensive range of service offerings
- Intel® Technology Provider Platinum Partner and member of the Intel® Internet of Things Solutions Alliance

(intel®) | Technology Provider
Platinum 2019

ads-tec Industrial IT GmbH
Heinrich-Hertz-Strasse 1
D-72622 Nuertingen
Phone +49 70 22 25 22-200
Fax +49 70 22 25 22-402
sales@ads-tec.de
www.ads-tec.de

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Industrial IT