

Machine Mounted Terminals and Displays
Stainless steel operating devices for use in the pharmaceutical, food, beverage and chemical industry



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





### 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 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.







### 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 high 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

### 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



### MMT8000 series Displays

The digital monitor solution for your existing industrial PC environment

- 17.3" and 23.8" full HD display
- $\mathsf{HDBaseT^{TM}}$ , situated up to 100 m 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 industry 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 multi-finger 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



→ Integrated WLAN module 802.11 a/b/g/n as an option



- → Fully enclosed stainless steel housing without screws or edges
- → Flexible mounting options
- → The latest multi-touch technology
- → Windows® 10 IoT Enterprise



- For 48 mm 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



VESA adaption

# MMT/MMD8000 Series Product Benefits



### Easy to clean Optimized 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)
- CCC confirmation 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





### Tried and tested machine operation

### Functions via pushbutton

- Up to 7 freely programmable 22.5 mm 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 multitouch technologies provide the ideal platform for modern visualisation of the highest standard.

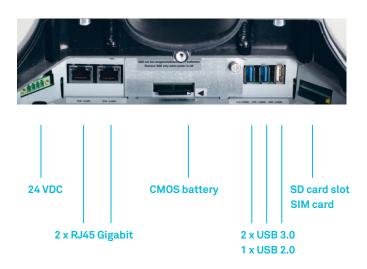


Terminal system



### Latest Intel® processor technology Supports modern operating systems

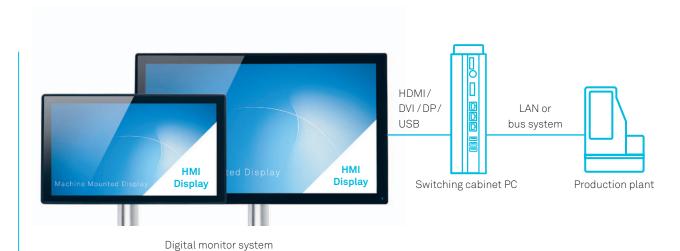
- Either Intel® Celeron® 1.6 GHz or Intel® Core™ i5 1.9 GHz processors
- Passive cooling using heat pipe technology



# MMD Machine Mounted Displays

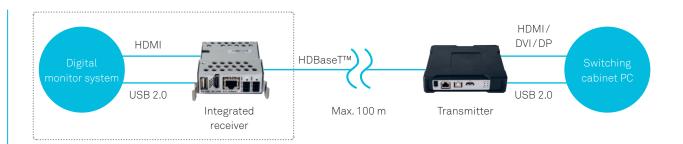
# MMD Machine Mounted Displays The digital monitor solution for connection of your existing industrial PC environment

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.



### 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

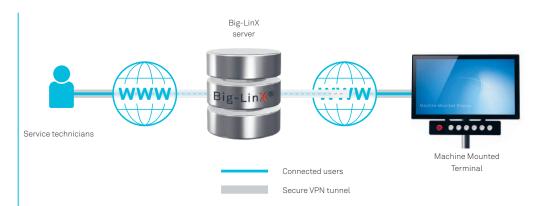


### HDBaseT™ Extender Kit The additional option for longer distances

Bridge distances between computer and monitor of up to 100 m 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



### 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 with the OPC series.

- $\bullet$  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 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<sup>®</sup>

# 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 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 aclstec Service	SILVER adstec Service	GOLD adstec Service
Protection against technical malfunctions	_*	<b>✓</b>	<b>✓</b>	<b>✓</b>
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 aclatec Service
Repair costs are accepted, even in the event of mechanical damage	<b>-</b> *	<b>✓</b>

### ADS-TEC Services Comprehensive protection »Full Comprehensive Coverage FCC«

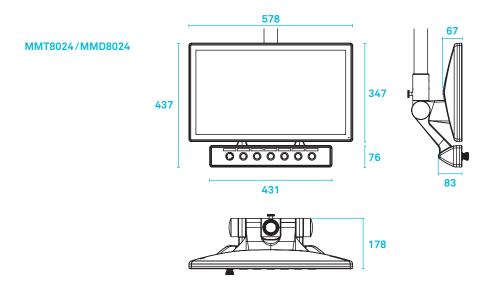
»Comprehensive Coverage« is the service which is comparable to fully comprehensive insurance for industrial computing products, which also takes effect in the event of sudden and externally-caused defects such as damage caused by a fall or the mechanical destruction of a touch-screen. All repair costs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

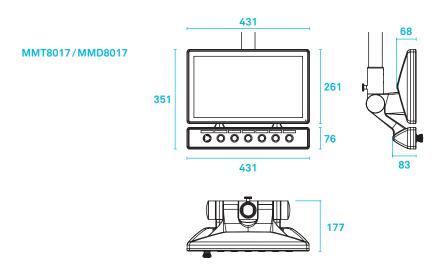
#### ADS-TEC Services Services & customising made to measure

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.

# MMT/MMD Technical Data

ice data	MMT8017	MMT8024	MMD8017	MMD8024		
Housing	Fully enclosed stainless steel housing					
<b>Display</b> 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	Bis 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 display port			
Wireless	Optional: Integrated WLAN module 802.11 a/b/g/n					
Power adapter	18 - 30 VDC					
Operating system (64 bit)	Windows® Embedded Standard 7 Windows® 7 Ultimate for Embedded Systems Windows® 10 IoT		-			
Protection class	IP65 (not verified by UL, tested by ads-tec 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. 8 kg	Approx. 9.5 kg	Approx. 8 kg	Approx. 9.5 kg		
Vibration resistance	DIN EN 60068-2-6					
Shock resistance	DIN EN 60068-2-27					
Humidity	10 to 85% non-condensing					









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
- $\bullet$  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











