MTL GECMA PC

Personal Computer for hazardous areas - zone 1/2 (gas)

- Platform, modular design concept
- Lightweight, slimline design
- Specified for use in hazardous areas with Ex approvals
- Display options 19", 22" or 24", in different resolutions
- Fibre optic or copper Ethernet network connection
- Designed for maximum performance and reliability in harsh environments
- Dual ethernet ports for redundant data connectivity

As part of the MTL GECMA Work Station (WS) range, the MTL GECMA Personal Computer (PC) is an operating terminal designed to enhance visualization within your process using high definition display options of 19", 22" or 24". They can be specified for use as a Personal Computer within the strictest of hygienic conditions, aggressive indoor and outdoor production environments and in Ex areas typically found in pharmaceutical, chemical, petro chemical, oil & gas and off-shore manufacturing.

This latest generation of MTL GECMA Personal Computers from Eaton supports EX e copper based and Ex op fibre network communications over significantly longer distances and allows data communication between the Terminal and the Server through the Local Area Network via copper or fibre optic cable. The dual Ethernet Gigabit port allows for redundant high speed and high bandwidth data transmission. The Quad Core CPU with 2GHz frequency ensures that even complex applications run smoothly. The 64GB Solid State Disk allows for fast access and reliable data storage.

MTL GECMA PC displays are of the highest industrial quality. To ensure the best readability, the terminal incorporates optical bonding and LED-backlit technology resulting in a high resolution image in a low power display.

The MTL GECMA PC has been designed to conform to a wide range of international Ex-approvals. International companies can operate using the same system, setup and interfaces worldwide, increasing overall safety, reliability and highest dependability across their business, whilst offering easy installation, individual design and consistency with a 'state-of-the-art' solution.

Its slim, flexible modular construction can be used in even the harshest environments and allows the MTL GECMA PC to be specified to meet your plant's requirements with the added benefit of a quality product. This not only shortens delivery time considerably but with maintenance now possible by changing modules even on site, increases your plants safety and significantly reduces downtime.

MTL GECMA PC is also available with a large range of specialised housing options, the modular design concept enables you to benefit from a cost effective, tailored and customised solution for your application installation.

The multiple interfaces future-proof your investment and allows easy expansion for additional connected devices, such as scanners or card readers.

Existing MTL GECMA remote operating systems can be upgraded quickly and easily without installing new cables, resulting in state-of-the-art visualisation technology utilising existing cables (applicable to copper versions only).*

*Contact us for more details

Powering Business Worldwide

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Publication No. EPS MTL GECMA PC Rev 1 240217
February 2017

MTL GECMA PC

July 2019

SPECIFICATION

ELECTRICAL

	19″	22″	24″
Screen size:	19 inch (48 cm) - across diagonal	21.5 inch (54 cm) - across diagonal	24 inch (61 cm) - across diagonal
Display:	1280 x 1024 pixels, lower resolutions are interpolated, 5:4 picture format, 16.7 million colours	1920 x 1080 pixels, lower resolutions are interpolated, 16:9 picture format, 16.7 million colours	1920 x 1200 pixels, lower resolutions are interpolated, 16:10 picture format, 16.7 million colours
Brightness:	250 cd/m^2		
Contrast ratio:	1000:1 typical		
Viewing angle:	170/160° typical at CR ≥ 10		
Touch screen (optional):	Resistive 5-wire glass touch screen		
CPU:	Quad core Intel Celeron J1900		
Frequency:	2 GHz (2.42 GHz burst frequency)		
Memory:	4GB DDR3L (max. 8GB)		
Video:	Intel Gen7 graphic engine		

TERMINAL UNIT

Power Supply:	AC 100-240V AC, 50/60Hz, DC 20-30V DC
Input Power:	80W (typical) / 88W (maximum)
Ethernet:	2x Ex e 1000Mbps Copper Ports OR 2x Ethernet Fibre ports with 2x LC connectors (Single-Mode or Multi-Mode)
WatchDog Timer:	Output system reset, programmable counter from 1 ~ 255 minutes/seconds
Storage:	64GB SSD (larger storage size upon request)
Serial:	1x Ex e RS232, 1x Ex i RS232
USB:	2x Ex e USB 2.0, 4x Ex i USB 2.0
Pointing Devices:	2x Ex i PS/2 for keyboard and pointing device
Operating System:	Windows 10 Professional 64bit
Client Application installed:	Remote desktop connection (pre-installed), others on request

MECHANICAL

Housing material:	Stainless steel V2A, EN std 1.4301, SAE grade 304 V4A, EN std 1.4404, SAE grade 316L (optional) Electro polishing (optional)		
Weight:	65kg (full terminal)	69kg (full terminal)	75kg (full terminal)
Dimensions (mm):	(W x H x D) 509 x 429 x 50	(W x H x D) 610 x 400 x 50	(W x H x D) 675 x 461 x 50
Module assembly dimension without housing (mm):	509 (W) x 429 (H) x 125 (D*) *depth behind mounted display module	610 (W) x 400 (H) x 125 (D*) *depth behind mounted display module	675 (W) x 461 (H) x 125 (D*) *depth behind mounted display module

ENVIRONMENTAL

Temperature:	Operating ambient temperature: -20°C to +50°C (10-90% RH, non-condensing) Certified ambient temperature: -30°C to +60°C (10-90% RH, non-condensing) Ambient storage temperature: -40°C to +70°C (10-90% RH, non-condensing)
Ingress protection:	Front IP66/NEMA 4 (when mounted and assembled correctly)

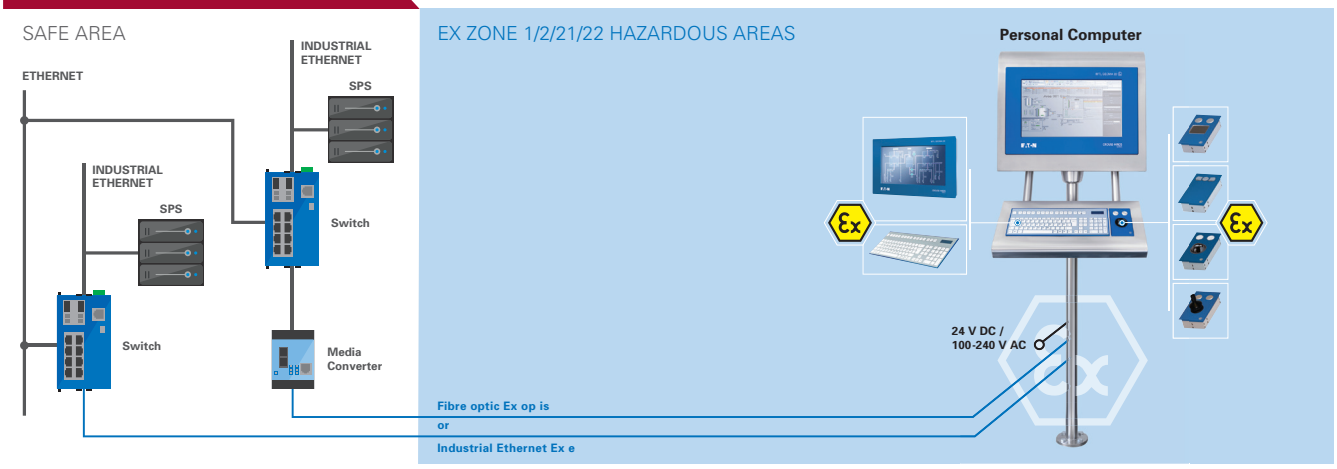
CERTIFICATION

Authority:	Certificate Com Module: IECEx: SIR 16.0062X ATEX: 16ATEX5180X
Approved for:	Certification Code Com Module: Ex eb mb[ib] op is IIC T4 Gb

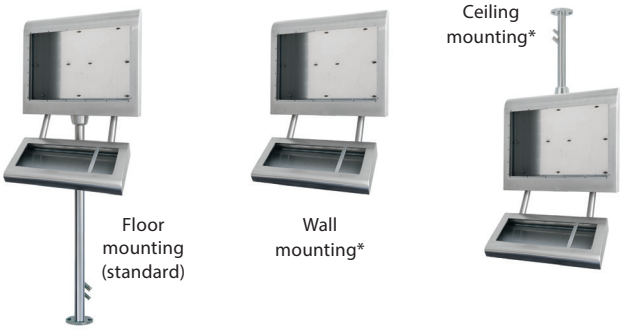
OPERATING PRINCIPLE

MTL GECMA PC operating principle

Standard



ENCLOSURE OPTIONS



Further enclosure options on request

*Please contact your local sales office for these options

MODULE OVERVIEW

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MTL GECMA TC

Thin Client for hazardous areas - zone 1/2 (gas)

- Platform, modular design concept
- Lightweight, slimline design
- Specified for use in hazardous areas with Ex approvals
- Display options 19", 22" or 24", in different resolutions
- Fibre optic or copper Ethernet network connection
- Designed for maximum performance and reliability in harsh environments
- Dual ethernet ports for redundant data connectivity

As part of the MTL GECMA Work Station (WS) range, the MTL GECMA Thin Client (TC) is an operating terminal designed to enhance visualization within your process using high definition display options of 19", 22" or 24". They can be specified for use as a Thin Client within the strictest of hygienic conditions, aggressive indoor and outdoor production environments and in Ex areas typically found in pharmaceutical, chemical, petro chemical, oil & gas and off-shore manufacturing.

This latest generation of MTL GECMA Thin Clients from Eaton supports EX e copper based and Ex op fibre network communications over significantly longer distances if required and allows data communication between the Terminal and the Server through the Local Area Network via copper or fibre optic cable. The dual ethernet gigabit port allows for redundant high speed and high bandwidth data transmission. The quad core CPU with 2GHz frequency ensures that even complex applications run smoothly and can be localized if necessary.

MTL GECMA TC displays are of the highest industrial quality. To ensure the best readability, the terminal incorporates optical bonding and LED-backlit technology resulting in a high resolution image in a low power display.

The MTL GECMA TC has been designed to conform to a wide range of international Ex-approvals. International companies can operate using the same system, setup and interfaces worldwide, increasing overall safety, reliability and highest dependability across their business, whilst offering easy installation, individual design and consistency with a 'state-of-the-art' solution.

Its slim, flexible modular construction can be used in even the harshest environments and allows the MTL GECMA TC to be specified to meet your plant's requirements with the added benefit of a quality product. This not only shortens delivery time considerably but with maintenance now possible by changing modules even on site, increases your plants safety and significantly reduces downtime.

MTL GECMA TC is also available with a large range of specialised housing options, the modular design concept enables you to benefit from a cost effective, tailored and customised solution for your application installation.

The multiple interfaces future-proof your investment and allow easy expansion for additional connected devices, such as scanners or card readers.

Existing MTL GECMA remote operating systems can be upgraded quickly and easily without installing new cables, resulting in state-of-the-art visualisation technology utilising existing cables (applicable to copper versions only).*

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February 2017

MTL GECMA TC

July 2019

SPECIFICATION

ELECTRICAL

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Contrast ratio:	1000:1 typical		
Viewing angle:	170/160° typical at CR ≥ 10		
Touch screen (optional):	Resistive 5-wire glass touch screen		
CPU:	Quad core Intel Celeron J1900		
Frequency:	2 GHz (2.42 GHz burst frequency)		
Memory:	4GB DDR3L (max. 8GB)		
Video:	Intel Gen7 graphic engine		

TERMINAL UNIT

Power Supply:	AC 100-240V AC, 50/60Hz, DC 20-30V DC
Input Power:	80W (typical) / 88W (maximum)
Ethernet:	2x Ex e 1000Mbps Copper Ports OR 2x Ethernet Fibre ports with 2x LC connectors (Single-Mode or Multi-Mode)
WatchDog Timer:	Output system reset, programmable counter from 1 ~ 255 minutes/seconds
Storage:	64GB SSD (larger storage size upon request)
Serial:	1x Ex e RS232, 1x Ex i RS232
USB:	2x Ex e USB 2.0, 4x Ex i USB 2.0
Pointing Devices:	2x Ex i PS/2 for keyboard and pointing device
Operating System:	Windows embedded 10 (Thin Client)
Client Application installed:	Remote desktop connection (pre-installed), others on request

MECHANICAL

Housing material:	Stainless steel V2A, EN std 1.4301, SAE grade 304 V4A, EN std 1.4404, SAE grade 316L (optional) Electro polishing (optional)		
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OPERATING PRINCIPLE

MTL GECMA TC operating principle

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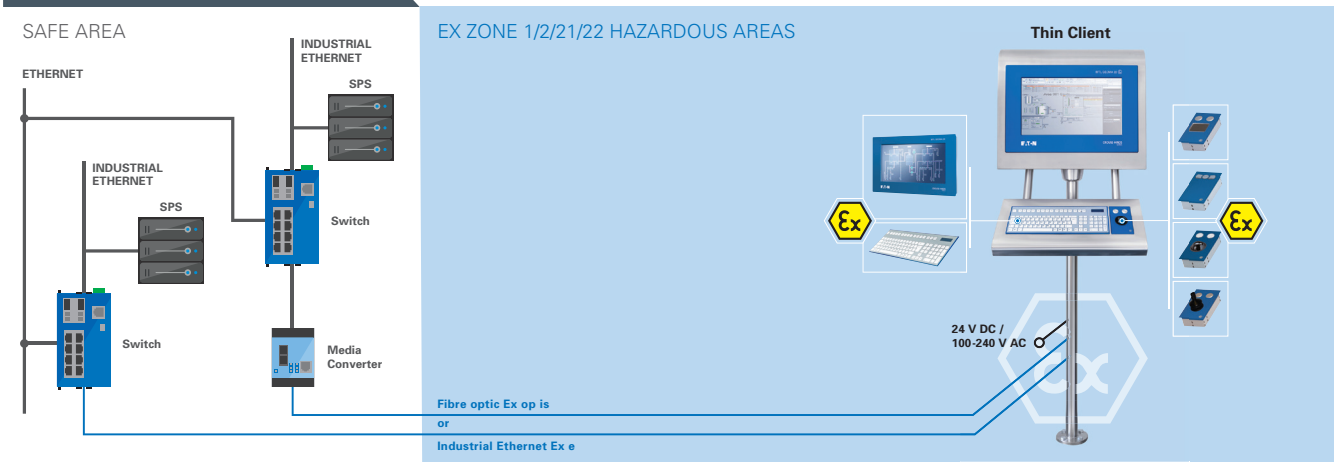
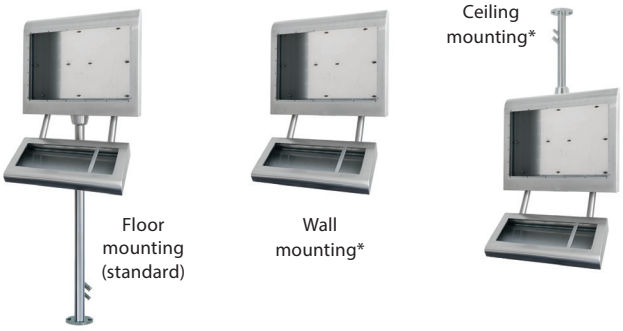


ENCLOSURE OPTIONS



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