

# MTL GECMA RT

## Remote Terminal 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 data transmission
- Designed for maximum performance and reliability in harsh environments
- DVI & USB interfaces
- Savings of software licence costs
- Unique intrinsically safe and alarm visualisation



**As part of the MTL GECMA Work Station (WS) range, the MTL GECMA Remote Terminal (RT) is an operating terminal designed to enhance visualization within your process using high resolution display options of 19", 22" or 24".** They can be specified for use as a Remote Terminal 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 Remote Terminals from Eaton allows digital data communications** to a localised terminal via copper or fibre optic cable, giving you seamless transmissions over significantly longer distances if required. The video system will scale many video input modes into the native format of the LCD panel whilst preserving the aspect ratio of the source image, offering the best image quality.

**MTL GECMA RT 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 RT 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 RT 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 availability.

**MTL GECMA RT 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 printers.

**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*

## SPECIFICATION

### ELECTRICAL

	19"	22"	24"
<b>Screen size:</b>	19 inch (48 cm) - across diagonal	21.5 inch (54 cm) - across diagonal	24 inch (61 cm) - across diagonal
<b>Screen type:</b>	LCD thin film technology (TFT) with LED backlight		
<b>Display:</b>	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
<b>Brightness:</b>	250 cd/m <sup>2</sup>		
<b>Contrast ratio:</b>	1000:1 typical		
<b>Viewing angle:</b>	170/160° typical at CR ≥ 10		
<b>Touch screen (optional):</b>	Resistive 5-wire glass touch screen		
<b>Technology:</b>	Proprietary full digital KVM transmission		

### TERMINAL UNIT

<b>Power supply:</b>	AC 100-240V AC, 50/60Hz, DC 20-30V DC
<b>Input power:</b>	50W (typical) 100W (maximum)
<b>Pointing Devices:</b>	2x Ex i PS/2 for keyboard and pointing device
<b>Universal port:</b>	4 x USB 2.0 intrinsically safe, transparent USB
<b>Serial port:</b>	RS232
<b>Data cable (copper):</b>	CAT 6A or higher recommended*
<b>Fibre-optic cable:</b>	Multi mode or Single mode

### MECHANICAL

<b>Housing material:</b>	Stainless steel V2A, EN std 1.4301, SAE grade 304 V4A, EN std 1.4404, SAE grade 316L (optional) Electro polishing (optional)		
<b>Weight:</b>	65kg (full terminal)	69kg (full terminal)	75kg (full terminal)
<b>Dimensions (mm):</b>	(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
<b>Module assembly dimension without housing (mm):</b>	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

### SAFE AREA UNIT

<b>Power supply:</b>	100 - 240VAC 50/60Hz
<b>Input power:</b>	6W (typical) 25W (maximum) @ 4-fold Rack
<b>Data and KB/Mouse port:</b>	USB
<b>Serial port:</b>	RS232
<b>Video In:</b>	DVI-D (DVI-I / VGA on request)
<b>Video out:</b>	DVI-D

### ENVIRONMENTAL

<b>Temperature:</b>	Operating ambient temperature: -10°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)
<b>Ingress protection:</b>	IP66 (front side)

\*Contact us for more details

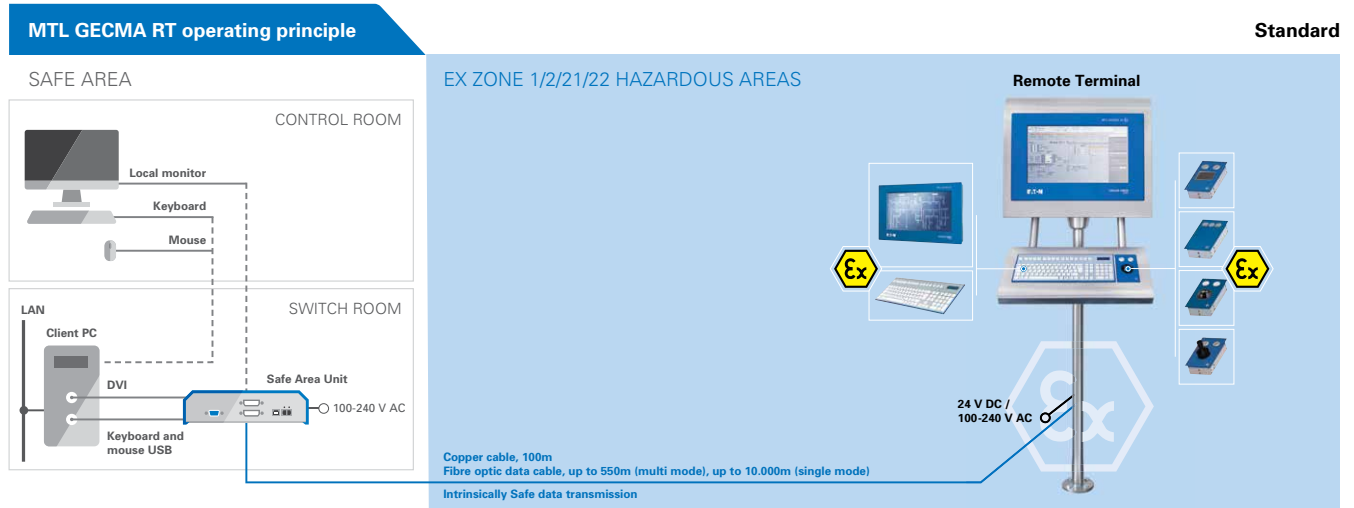
# MTL GECMA RT

February 2017

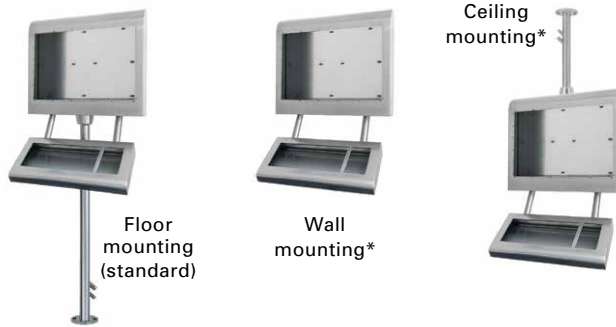
## CERTIFICATION

<b>Authority:</b>	Certificate Com Module: IECEX: SIR 14.0031X ATEX: 14ATEX5062X
<b>Approved for:</b>	Certification Com Module: With op is interface Ex mb(ib) op is IIC T4 Gb. Without op is interface Ex mb(ib) IIC T4 Gb.

## OPERATING PRINCIPLE



## ENCLOSURE OPTIONS



Further enclosure options on request

\*Please contact your local sales office for these options



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Publication No. EPS MTL GECMA RT Rev 1 210217  
February 2017

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# GECMA RT safe area unit

## 19" Rack mounted version fibre optic

The GECMA RT safe area unit is a single video channel transmission unit. It enables the transparent Keyboard-Video-Mouse (KVM) transmission via Multi Mode or Single Mode Fibre cable from the safe area into the hazardous area through an intrinsically safe, digital data transmission. A distance of up to 10.000m can be reached at a resolution of up to 1920x1200 pixel depending on the version of the safe area unit.



\*

\* 4 Channel Rack Version

### Features

<b>Digital Video In</b>	DVI-D (Digital only - VGA on request)	
<b>Digital Video Out</b>	DVI-D (Digital only)	
<b>USB In</b>	Transparent USB 2.0 connection for keyboard and pointing device	
<b>RS232</b>	Single channel RS232 connection	
<b>Fibre link</b>		
	<b>Multi Mode</b>	<b>Single Mode</b>
<b>Wave length</b>	850nm	1310nm
<b>Optical Budget</b>	7,3dBm	12,8dBm
<b>Distance</b>	up to 550m (50/125µm)	up to 10.000m (9/125µm)
<b>Resolution</b>	up to 1920 x 1200 pixel, Full HD 1080p resolution at 1920x1080 @ 60Hz and 16:9 picture format	
<b>Designation</b>	GECMA RT safe area unit /19" rack mounted version	
<b>Housing</b>	19" plug in, 1HE (1U)	
<b>Power Supply</b>	100 - 240 V AC / 50/60 Hz /, typical: 10W maximum: 48 W	
<b>Power Input</b>	6 W	
<b>Connections</b>	DVI/VGA IN, DVI OUT, RS232 IN, USB IN, FIBRE LINK	
<b>Fuses</b>	2 x 2 AT	

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# GECMA RT safe area unit- 19" Rack mounted version

September 2016

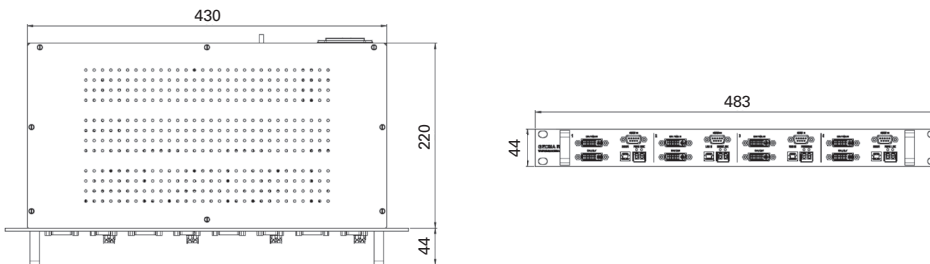
## Features

<b>Dimensions</b>	430mm Width x 44mm Height x 220mm Depth (Body) 483mm Width x 44mm Height x 264mm Depth (Total)
<b>Weight</b>	5,0 kg
<b>Certified Ambient Temperature</b>	-30 °C ≤ Ta ≤ +60 °C
<b>Operating Ambient Temperature</b>	-10 °C ≤ Ta ≤ +50 °C

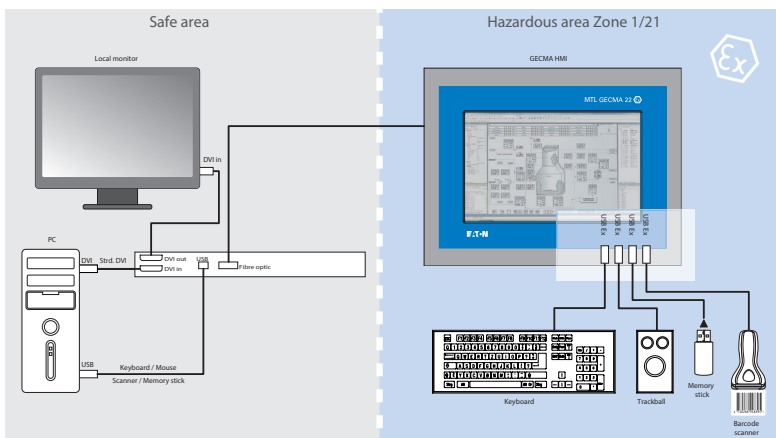
## Article Codes

### GECMA RT Safe Area Unit 19" Rack Version

1 Terminal	Multi Mode	<b>GEC-GE1RT-TRM01-00</b>
2 Terminals	Multi Mode	<b>GEC-GE1RT-TRM02-00</b>
3 Terminals	Multi Mode	<b>GEC-GE1RT-TRM03-00</b>
4 Terminals	Multi Mode	<b>GEC-GE1RT-TRM04-00</b>
1 Terminal	Single Mode	<b>GEC-GE1RT-TRS01-00</b>
2 Terminals	Single Mode	<b>GEC-GE1RT-TRS02-00</b>
3 Terminals	Single Mode	<b>GEC-GE1RT-TRS03-00</b>
4 Terminals	Single Mode	<b>GEC-GE1RT-TRS04-00</b>



## Standard Setup with DVI/ USB Connection



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Publication No. EPS GECMA RT SAU Rack rev 2 210916  
September 2016

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# GECMA RT safe area unit

## Desktop version fibre optic

The GECMA RT safe area unit is a single video channel transmission unit. It enables the transparent Keyboard-Video-Mouse (KVM) transmission via Multi Mode or Single Mode Fibre cable from the safe area into the hazardous area through an intrinsically safe, digital data transmission. A distance of up to 10.000m can be reached at a resolution of up to 1920x1200 pixel depending on the version of the safe area unit.



### Features

<b>Digital Video In</b>	DVI-D (Digital only - VGA on request)	
<b>Digital Video Out</b>	DVI-D (Digital only)	
<b>USB In</b>	Transparent USB 2.0 connection for keyboard and pointing device	
<b>RS232</b>	Single Channel RS232 connection	
<b>FIBRE LINK</b>		
	<b>Multi Mode</b>	<b>Single Mode</b>
<b>Wave length</b>	850nm	1310nm
<b>Optical Budget</b>	7,3dBm	12,8dBm
<b>Distance</b>	up to 550m (50/125µm)	up to 10.000m (9/125µm)
<b>Resolution</b>	up to 1920 x 1200 pixel, Full HD 1080p resolution at 1920x1080 @ 60Hz and 16:9 picture format	

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# GECMA RT safe area unit- Desktop version

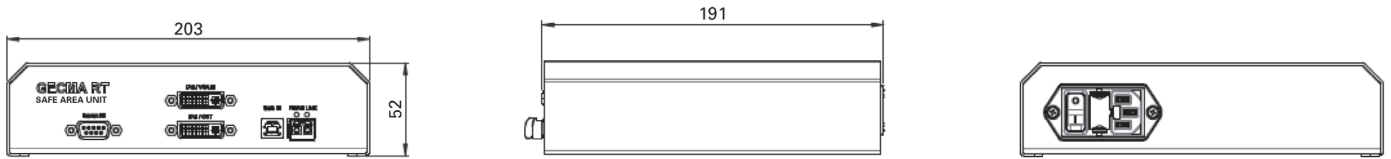
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## Features

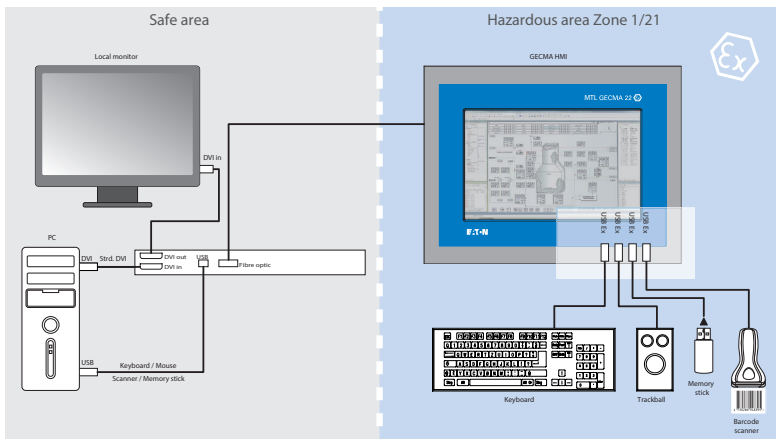
<b>Designation</b>	GECMA RT safe area unit /desktop
<b>Housing</b>	Desktop housing
<b>Power Supply</b>	100 - 240 V AC / 50/60 Hz /, typical: 10W maximum: 48 W
<b>Power Input</b>	6 W
<b>Connections</b>	DVI/VGA IN, DVI OUT, RS232 IN, USB IN, FIBRE LINK
<b>Fuses</b>	2 x 2 AT
<b>Dimensions</b>	203mm Width x 52mm Height x 191mm Depth
<b>Weight</b>	1.6 kg
<b>Certified Ambient Temperature</b>	-30 °C ≤ Ta ≤ +60 °C
<b>Operating Ambient Temperature</b>	-10 °C ≤ Ta ≤ +50 °C

## Article Codes

<b>GEC-GE1RT-TSM01-00</b>	GECMA RT Safe Area Unit Desktop Version MM (Multi Mode)
<b>GEC-GE1RT-TSS01-00</b>	GECMA RT Safe Area Unit Desktop Version SM (Single Mode)



## Standard Setup with DVI/ USB Connection



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Publication No. EPS GECMA RT SAU DT rev 2 210916  
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