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*

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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
Screen type:	LCD thin film technology (TFT) with LED backlight		
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		
Technology:	Proprietary full digital KVM transmission		

TERMINAL UNIT

Power supply:	AC 100-230Vac, 50/60Hz, or DC 18-36Vdc, 5.5A
Input power:	50W (typical) 100W (maximum)
Pointing Devices:	2x Ex i PS/2 for keyboard and pointing device
Universal port:	4 x USB 2.0 intrinsically safe, transparent USB
Serial port:	RS232
Data cable (copper):	CAT 6A or higher recommended*
Fibre-optic cable:	Multi mode or Single mode

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

SAFE AREA UNIT

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

ENVIRONMENTAL

Temperature:	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)
Ingress protection:	IP66 (front side)

*Contact us for more details

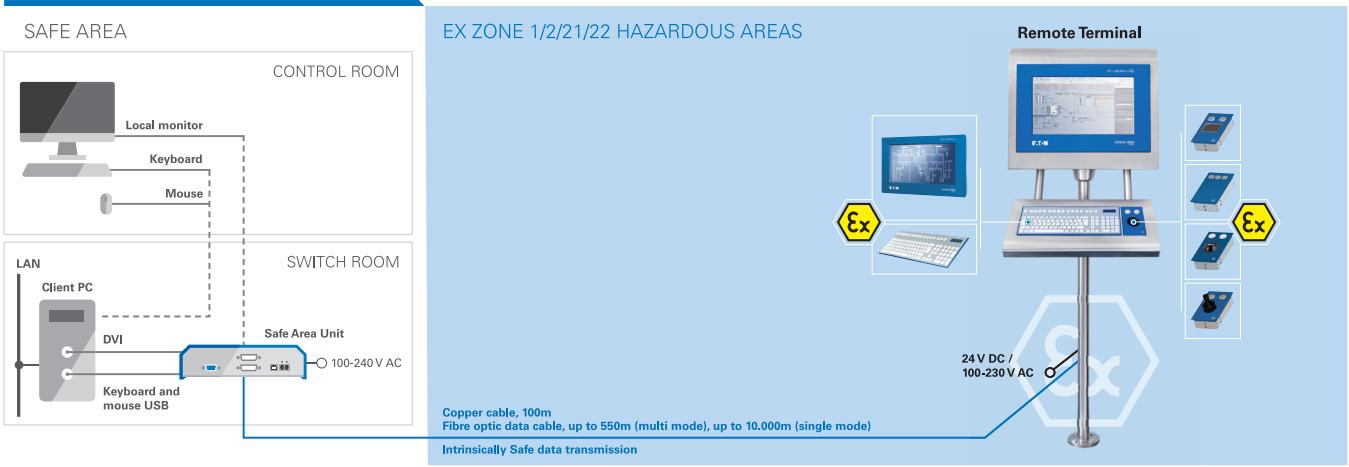
CERTIFICATION

For the latest certification information visit www.mtl-inst.com/certificates

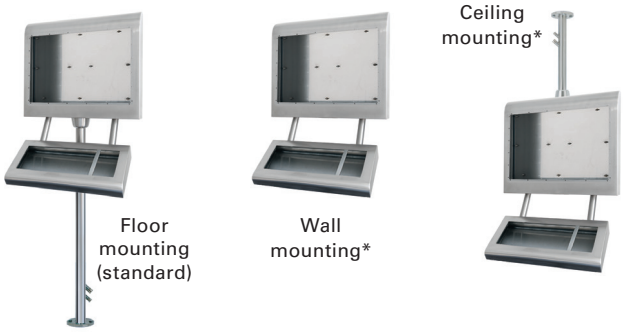
OPERATING PRINCIPLE

MTL GECMA RT operating principle

Standard



ENCLOSURE OPTIONS



Further enclosure options on request

*Please contact your local sales office for these options

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GECMA RT Safe Area Unit

Desktop Version Copper

The GECMA RT Safe Area Unit is a single video channel transmission unit. It enables the transparent Keyboard-Video-Mouse (KVM) transmission via Copper CAT-6A cable from the safe area into the hazardous area through an intrinsically safe, digital data transmission. A distance of up to 100m can be reached at a resolution of up to 1920x1200 pixel depending on the version of the Safe Area Unit.

Features

Digital Video In	DVI-D (Digital only - VGA on request)
Digital Video Out	DVI-D (Digital only)
USB In	Transparent USB 2.0 connection for Keyboard and Pointing Device
RS232	Single Channel RS232 connection
Cooper	I.S. Copper
	Copper
Category	CAT-6A
Bandwidth	500 MHz
Transfer	up to 10GBit-LAN
Distance	up to 100m
Resolution	up to 1920 x 1200 pixel, Full HD 1080p resolution at 1920x1080 @ 60Hz and 16:9 picture format

Technical data sheets are subject to modifications and amendments / No liability for misprints and errors.

Crouse-Hinds by EATON

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GECMA RT Safe Area Unit- Desktop Version

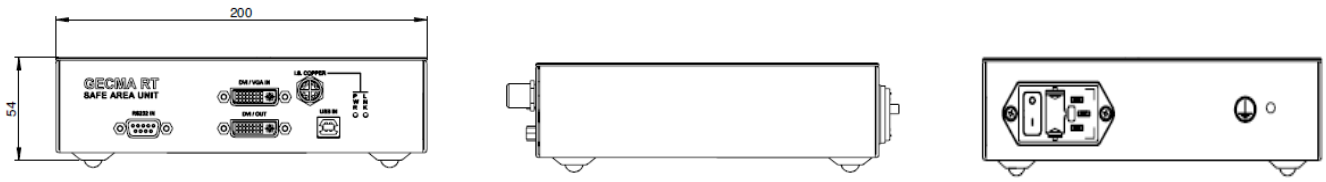
August 2019

Features

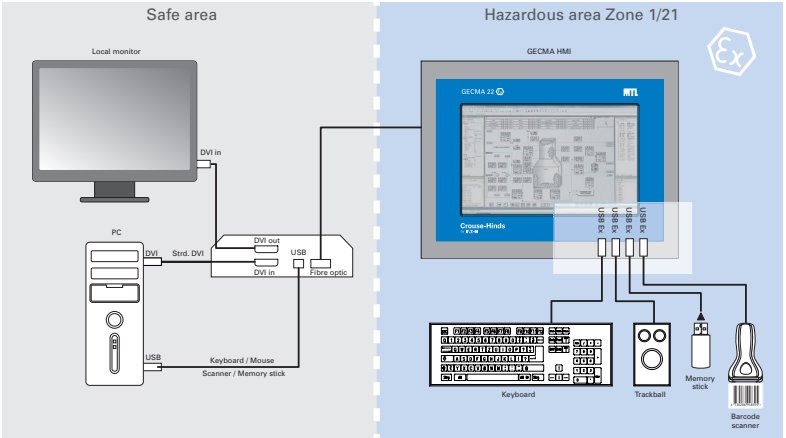
Designation	GECMA RT Safe Area Unit /Desktop
Housing	Desktop housing
Power Supply	100 - 240 V AC / 50/60 Hz /, typical: 10W maximum: 48 W
Power Input	6 W
Connections	DVI/VGA IN, DVI OUT, RS232 IN, USB IN, FIBRE LINK
Fuses	2 x 2 AT
Dimensions	203mm Width x 52mm Height x 191mm Depth
Weight	1.6 kg
Certified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

Article Codes

GEC-GE1RT-TSC01-00	GECMA RT Safe Area Unit Desktop Version CU (Copper)



Standard Setup with DVI/ USB Connection



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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

Digital Video In	DVI-D (Digital only - VGA on request)	
Digital Video Out	DVI-D (Digital only)	
USB In	Transparent USB 2.0 connection for keyboard and pointing device	
RS232	Single Channel RS232 connection	
FIBRE LINK		
	Multi Mode	**Single Mode**
Category	OM3	OS2
Wave length	850nm	1310nm
Optical Budget	7,3dBm	12,8dBm
Distance	up to 550m (50/125µm)	up to 10.000m (9/125µm)
Resolution	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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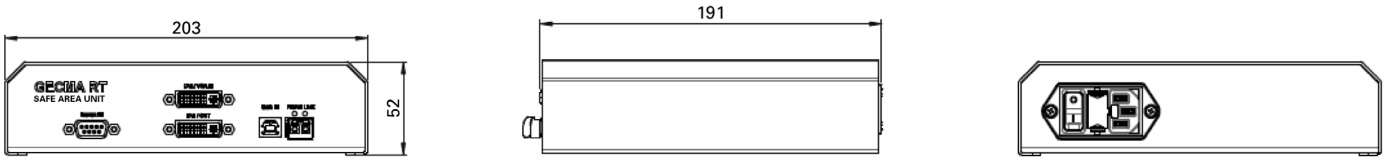
Features

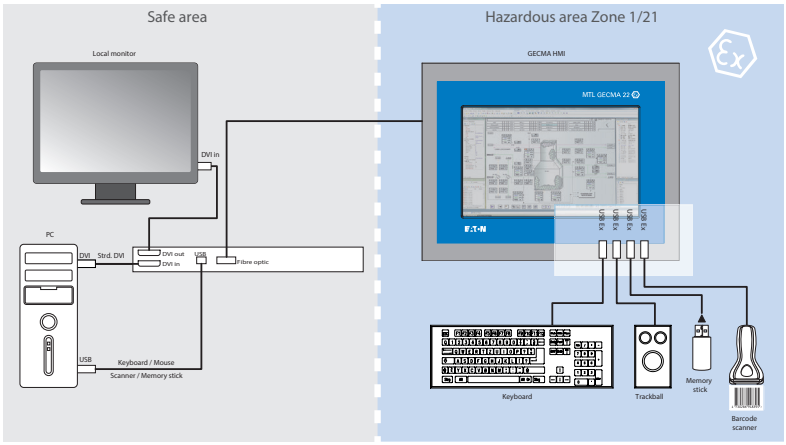
Designation	GECMA RT safe area unit /desktop
Housing	Desktop housing
Power Supply	100 - 240 V AC / 50/60 Hz /, typical: 10W maximum: 48 W
Power Input	6 W
Connections	DVI/VGA IN, DVI OUT, RS232 IN, USB IN, FIBRE LINK
Fuses	2 x 2 AT
Dimensions	203mm Width x 52mm Height x 191mm Depth
Weight	1.6 kg
Certified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

Article Codes

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



Standard Setup with DVI/ USB Connection



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GECMA RT safe area unit

19" Rack mounted version copper

* 4 Channel Rack Version

The GECMA RT safe area unit is a single video channel transmission unit. It enables the transparent Keyboard-Video-Mouse (KVM) transmission via Copper CAT-6A cable from the safe area into the hazardous area through an intrinsically safe, digital data transmission. A distance of up to 100m can be reached at a resolution of up to 1920x1200 pixel depending on the version of the safe area unit.

Features

Digital Video In	DVI-D (Digital only - VGA on request)
Digital Video Out	DVI-D (Digital only)
USB In	Transparent USB 2.0 connection for keyboard and pointing device
RS232	Single channel RS232 connection
Copper	I.S. Copper
	Copper
Catergory	CAT-6A
Bandwidth	500 MHz
Distance	up to 100m
Resolution	up to 1920 x 1200 pixel, Full HD 1080p resolution at 1920x1080 @ 60Hz and 16:9 picture format
Designation	GECMA RT safe area unit /19" rack mounted version
Housing	19" plug in, 1HE (1U)
Power Supply	100 - 240 V AC / 50/60 Hz /, typical: 10W maximum: 48 W
Power Input	25 W (with 4 outputs)
Connections	DVI/VGA IN, DVI OUT, RS232 IN, USB IN, COPPER I.S.
Fuses	2 x 2 AT

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GECMA RT safe area unit- 19” Rack mounted version

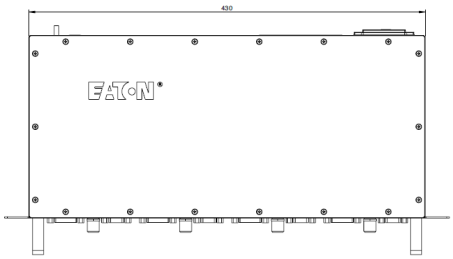
September 2016

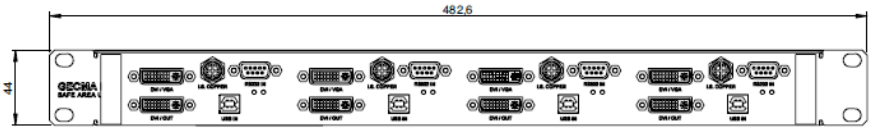
Features

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

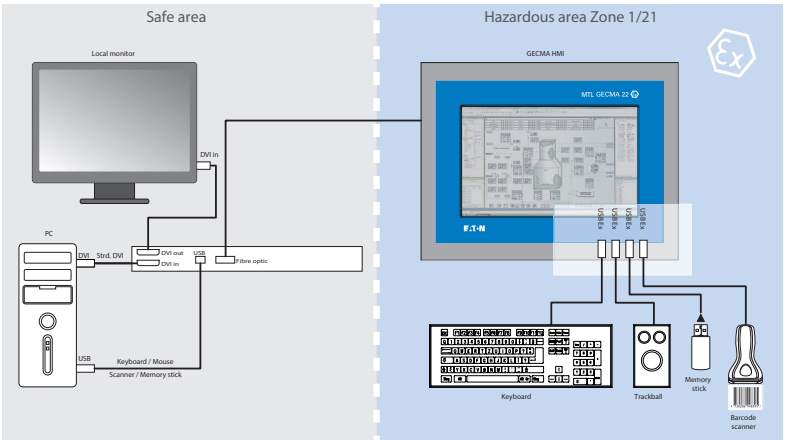
Article Codes

GECMA RT Safe Area Unit 19” Rack Version	
1 Terminal	**GEC-GE1RT-TRC01-00**
2 Terminals	**GEC-GE1RT-TRC02-00**
3 Terminals	**GEC-GE1RT-TRC03-00**
4 Terminals	**GEC-GE1RT-TRC04-00**





Standard Setup with DVI/ USB Connection



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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

Digital Video In	DVI-D (Digital only - VGA on request)	
Digital Video Out	DVI-D (Digital only)	
USB In	Transparent USB 2.0 connection for keyboard and pointing device	
RS232	Single channel RS232 connection	
Fibre link		
	Multi Mode	**Single Mode**
Category	OM3	OS2
Wave length	850nm	1310nm
Optical Budget	7,3dBm	12,8dBm
Distance	up to 550m (50/125µm)	up to 10.000m (9/125µm)
Resolution	up to 1920 x 1200 pixel, Full HD 1080p resolution at 1920x1080 @ 60Hz and 16:9 picture format	
Designation	GECMA RT safe area unit /19" rack mounted version	
Housing	19" plug in, 1HE (1U)	
Power Supply	100 - 240 V AC / 50/60 Hz /, typical: 10W maximum: 48 W	
Power Input	6 W	
Connections	DVI/VGA IN, DVI OUT, RS232 IN, USB IN, FIBRE LINK	
Fuses	2 x 2 AT	

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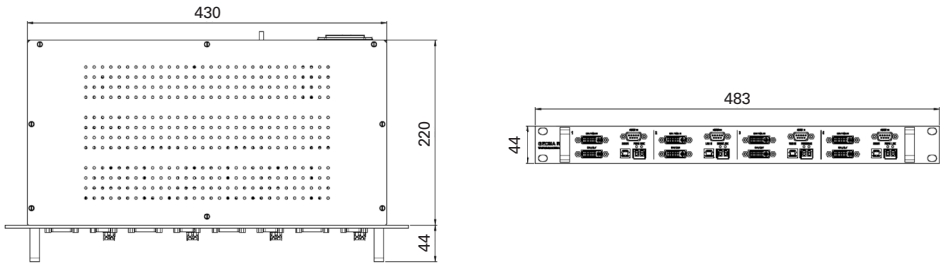
Features

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

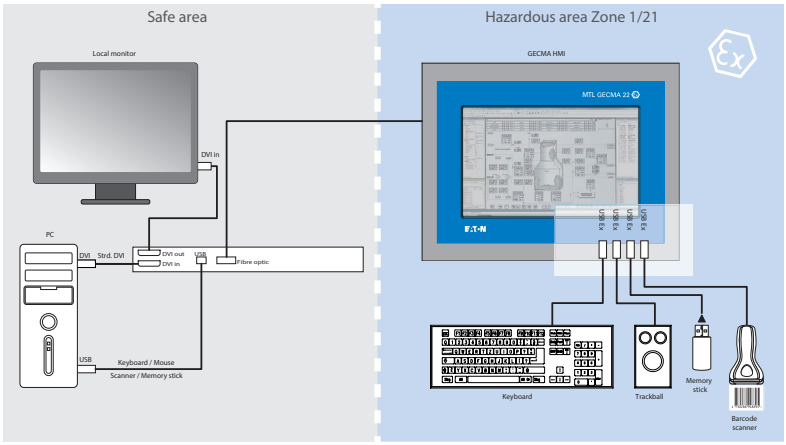
Article Codes

GECMA RT Safe Area Unit 19" Rack Version

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



Standard Setup with DVI/ USB Connection



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