MAXIMUS MPX SERIES2 with DELUX technology

NEW GENERATION OF EXPLOSION-PROOF PTZ WITH DAY/NIGHT CAMERA













- Certified explosion-proof for use in Zones 1 and 2, Group IIC (Gas), Zones 21 and 22, Group IIIC (Dust)
- Certified up to a temperature of +80°C
- Maximum resistance in corrosive environments
- · Possibility of direct connection via fiber optic





















MAXIMUM RESISTANCE IN THE MOST CRITICAL ENVIRONMENTS

MAXIMUS MPX SERIES2 is an ex-proof Full-HD PTZ camera that is ideal for effective preventative video surveillance and process monitoring in the Oil & Gas, maritime or industrial sectors where fire or explosion hazards may exist due to the presence of flammable gases or vapors, flammable liquids or combustible dusts.

MAXIMUS MPX SERIES2 offers the highest level of corrosion resistance thanks to its solid AISI 316L stainless-steel construction and its microshot and electropolished surfaces. As well as this, the IP66/IP67/IP68/IP69, NEMA Type 4X and Type 6P certifications guarantee complete protection against water and dust. It can continue to operate in winds up to 210 Km/h.

CERTIFIED QUALITY

Every version of MAXIMUS MPX SERIES2 PTZ is explosion-proof certified with an ambient temperature of up to $+80^{\circ}$ C. They have international certifications for use in Zone 1 and 2, Group IIC for gas, Zone 21 and 22, Group IIIC, Class 1 Div. 2, for dust (ATEX, IECEx, UL/CSA, EAC Ex, INMETRO, KCs). Thanks to the double cable entry, both 120Vac and 230Vac voltage supply versions are compliant with UL/CSA standards.

MAXIMUS MPX SERIES2 products are Lloyd's Register Marine Type Approval System Test Specification Number 1 certified and can be used in Marine and Offshore environments with category types ENV1, ENV2, ENV3 and ENV5 (for example, passenger ships, open bridges, closed spaces, technical rooms subject to heat generated by equipment, areas where there is a risk of explosion, and visual support for docking manoeuvres).

INSTALLATION FLEXIBILITY

The SERIES2 range of cameras can easily connect the PTZ via fibre optic thanks to the SFP module slot installed directly into the junction box integrated into the base of the unit. The double cable entry and the numerous accessories and supports available (washing system, communication box, pre-wired cables, cable glands, wall supports, railing supports, corners and pole), allow exceptional installation flexibility.

Furthermore, the compact design adapts to narrow spaces, while the reduced weight of the unit makes it simpler to mount.

DELUX TECHNOLOGY - HIGH QUALITY IMAGE

The super low-light Full-HD 1080p, 60fps camera with 30x optical zoom and Deluxe technology is unbeatable for its exceptional brightness and captures footage in sharp detail and vivid colour, even in low-light conditions up to 0.006 lux (0.0006 lux in black and white). This is a particularly advantageous feature when monitoring external sensitive areas where people, objects, vehicles in motion and anomalous events may need to be identified at any time, day or night, and with the highest levels of detail.

Up to a maximum of 3 simultaneous and independent video streams can be transmitted via network in H.264/AVC, MPEG4, MJPEG or JPEG format

VIDEOTEC ANALYTICS

The MAXIMUS MPX SERIES2 video camera with VIDEOTEC ANALYTICS integrates robust algorithms for accurate detection with PTZ and precise, fluid auto-tracking even in the harshest climate conditions, ensuring that the operator has full situation awareness at all times. The detection algorithm, in particular, is especially reliable even in rain and snow, video camera vibration, low contrast, unexpected changes in light or shadow and in the presence of small animals and insects.

Similarly, the auto-tracking feature keeps the target in the centre of the frame by panning and tilting fluidly and controlling the zoom function. This occurs even if the target moves and rapidly changes direction or if the scene is affected by poor lighting, such as low contrast or continual changes in the light.

Videotec Analytics provides: maximum efficiency in intrusion detection, reduction of costs and human-induced errors, cuts in storage costs, reduction in the time required to monitor and detect unusual events from recordings, plus a drastic drop in false alarms.

GEOMOVE AND GEOMOVE&TRACK FUNCTIONS

The new MAXIMUS MPX SERIES2 PTZ video cameras can be geo-localized on the maps to support the GeoMove and GeoMove&Track features..

The GeoMove feature is very useful in perimeter surveillance systems and for port traffic control because it lets you capture any target through geographic coordinates, even in critical visibility or offshore conditions.

The GeoMove feature can typically be activated using a camera with Videotec Analytics on board, or through third-party software such as Video Management Software (VMS), which provide the geographic coordinates of a target and use them to guide the Videotec PTZ cameras to capture the target. The coordinates can also be sent in the same way using Vessel Tracking Services (VTS - navigation control services) or using radar control systems.

Furthermore, PTZ video cameras with Videotec Analytics on board can activate the GeoMove&Track feature. In this case, the Videotec PTZ camera that receives the coordinates of the target, thanks to the video analytics, can also recognize and autonomously follow the geo-localized target.

The GeoMove&Track function offers the benefit of having a complete, turn-key positioning and tracking solution, quaranteed by Videotec.

100% MADE IN VIDEOTEC

SERIES2 offers an integrated certified all-in-one professional solution. Since everything from mechanics to electronics, positioning and networking, software and firmware are all proudly developed end-to-end by Videotec's internal teams, as is the case for all the company's products, these PTZs come with the Videotec guarantee of being reliable, cyber-safe, future-proof and easily integrated with third-party products.

At the heart of Videotec's product development is the concept of cyber-sustainability. To help customers protect their video surveillance systems and keep them secure, Videotec provides constant updates, training and support throughout the lifecycle of its products, regardless of how old the device is or whether it is still for sale.

Thanks to digitally signed firmware, password-restricted access, access control, centralised management of certificates and compliance with ONVIF Security Service specifications, Videotec guarantees that all its IP products will have the highest level of security during data transfer and device access.

In the SERIES2, Videotec has expanded the list of compatible software, but has not changed the tested and proven software functions and protocols already found in the MAXIMUS MPX series. As a result, Videotec can guarantee complete compatibility and interchangeability between the previous and new generations of PTZ, while protecting the investments made by its customers when it comes to validation and integration of MAXIMUS MPX.

TECHNICAL DATA

GENERAL

AISI 316L stainless steel construction

External surfaces micro-shot peened and electro-polished

Dynamic positioning control system

MECHANICAL

Cable inputs: 2 x 3/4" NPT

Zero backlash

Horizontal rotation: 360°, continuous rotation

Vertical rotation: from -90° up to +90°

Horizontal speed (variable): from 0.1° to 100°/s

Tilt speed (variable): from 0.1° to 100°/s

Accuracy of preset positions: 0.02°

Integrated wiper

Window with extra clear tempered glass: thick 12mm (0.47in)

Unit weight: 26.5kg (58lb)

ELECTRICAL

Supply voltage/Current consumption:

- 230Vac ±10%, 0.5A, 50/60Hz
- 24Vac ±10%, 5A, 50/60Hz
- 120Vac ±10%, 1A, 50/60Hz
- 220Vac ±10%, 0.54A, 50/60Hz
- 100Vac ±10%, 1.2A, 50/60Hz

Power consumption:

• 120W max

NETWORK

RJ45 port

• Ethernet connection: 10BASE-T/100BASE-T

Slot SFP (SMALL FORM FACTOR PLUGGABLE)

- Ethernet connection: 100BASE-FX
- · Supply voltage: 3.3V
- · Standard: MSA compliant

The SFP module (not supplied by VIDEOTEC) must meet the following requirements:

- Laser: Class 1, complies with EN60825-1
- Certification: UL/IEC 60950-1 or UL/IEC 62368-1

CYBERSECURITY

Digitally signed firmware

Password restricted access (HTTP digest)

Support of various user access levels

Control of accesses IEEE 802.1X

HTTPS cryptography using TLS1.0, TLS1.1, TLS1.2 and TLS1.3

Centralised certificate management

Complies with ONVIF Security Service specifications

VIDEO

Video encoder

- Communication protocol: ONVIF, Profile Q, Profile S and Profile T
- Device configuration: TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, HTTPS, NTP, DHCP, WS-DISCOVERY, DSCP, IGMP (Multicast), SOAP, DNS
- Streaming: RTSP, RTCP, RTP/IPv4-IPv6, HTTP, Multicast
- Video compression: H.264/AVC, MJPEG, MPEG4
- 3 independent video streams Full HD
- Image resolution: from 320x180pixel up to 1920x1080pixel in 8 steps
- Selectable frame rate from 1 to 60 images per second (fps)
- · Web Server
- Directional OSD (maximum 4 settable areas)
- · Motion Detection
- Video analytics: VIDEOTEC ANALYTICS (optional)
- QoS: Differentiated DSCPs for streaming and device management
- SNMP and NTCIP protocols

VIDEO ANALYTICS

Ultra-robust detection algorithms and auto-tracking, specifically for outdoor perimeter control

Targets Classification: People, vehicles, generic objects

Programmable rules for video analysis, VIDEOTEC ANALYTICS (it is possible to rapidly configure up to ten rules for every preset using an intuitive control management interface)

- Line crossing: the target triggers an alarm if it crosses the line in one or both directions
- Entering/leaving area: the target triggers an alarm if it leaves or enters the configured area
- Appearing in area: the target triggers an alarm if it appears inside the configured area
- Loitering: the target triggers an alarm if it stays inside the configured area over the set time

Detection Mask: disables the detection activity in a portion of the image to prevent false alarms

Video Tampering Detection: a specific ONVIF alarm is triggered if the video camera view is obstructed (e.g. spray)

CAMERAS

Day/Night Full HD 30x DELUX

Resolution: Full HD 1080p (1920x1080) Image Sensor: 1/2.8" Exmor™ R CMOS sensor

Effective Pixels: approx. 2.38 Megapixels

Minimum Illumination:

- Colour: 0.006lx (F1.6, 30 IRE)
- B/W: 0.0006lx (F1.6, 30 IRE)

Focal length: from 4.5mm (wide) up to 135mm (tele)

Zoom: 30x (480x with digital zoom)

Iris: from F1.6 up to F9.6 (Auto, Manual)

Horizontal Viewing Angle: from 61.6° (wide end) up to 2.50° (tele end)

Vertical Viewing Angle: from 37.07° (wide end) up to 1.44° (tele end)

Shutter speed: from 1/1s up to 1/10000s (Auto, Manual)

White balance: Auto, Manual

Gain: from OdB up to 100dB (Auto, Manual)

Wide Dynamic Range: 120dB

Focus System: Auto, Manual, Trigger

Picture Effects: E-flip, Color enhancement

Noise removal: 2D (3 levels), 3D (3 levels)

 ${\bf Exposure\ Control:\ Auto,\ Manual,\ Priority\ (Iris\ Priority,\ Shutter\ Priority),\ Brightness,\ Custom}$

De-fog: On/Off

Privacy zones masking (maximum 8 settable masks)

Indoor Flicker Reduction

Auto Slowshutter: Off, On (from 1/30s up to 1/1s)

Exposure compensation: Off, On (from level 0 up to level 14)

Sharpness: from level 0 up to level 3

I/O INTERFACE

Input for remote reset: 1

Alarm inputs: 1

Relay outputs: 1+1 (1 relay reserved for washer pump and one configurable, 1A, 30Vac/60Vdc max)

ENVIRONMENT

For indoors and outdoors installation

Certification temperature: from -40°C (-40°F) up to +80°C (+176°F)

 Temperature test complies with NEMA-TS 2-2003 (R2008) par. 2.1.5.1, test profile fig. 2-1 (from -34°C (-29.2°F) to +74°C (165.2°F)) (not valid for versions with integrated video analysis, VIDEOTEC ANALYTICS)

De-icing function intervention (cold start): from -40°C (-40°F) up to -10°C (14°F) Wind resistance

- PTZ static: 230km/h (143mph) max.
- PTZ operational at the maximum speed: 210km/h (130.5mph) max.

Relative humidity: from 5% up to 95%

CERTIFICATIONS

Electrical safety (CE): EN60950-1, IEC60950-1, EN62368-1, IEC62368-1

Electromagnetic compatibility (CE): EN50130-4, EN55032 (Class A), EN61000-6-4, EN61000-3-2, EN61000-3-3

RoHS (CE): EN50581

Outdoor installation (CE): EN60950-22, IEC60950-22

Vibration test: EN50130-5, EN60068-2-6

UL certification (UL60950-1, CAN/CSA C22.2 No. 60950-1-07, UL62368-1, CAN/CSA C22.2 No. 62368-1-14) (not available for 100Vac and 220Vac versions): cULus Listed

Electromagnetic compatibility (North America) (not available for 100Vac and 220Vac versions): FCC part 15 (Class A), ICES-003 (Class A)

IP protection degree (EN/IEC60529): IP66, IP67, IP68, IP69

Level of protection Type (UL50E) (not available for 100Vac and 220Vac versions): 4X, 6P

RCM (Australian and New Zealand Regulatory Compliance Mark)

KC certification (certification valid only for code MPXHD51A001C)

CERTIFICATIONS - EXPLOSION-PROOF APPLICATIONS

ATEX (EN IEC 60079-0, EN 60079-1, EN 60079-31)

IECEX (IEC 60079-0, IEC 60079-1, IEC 60079-31)

UL listed for USA (UL 60079-0, UL 60079-1, UL 60079-31) (not available for 100Vac and 220Vac versions)

UL listed for Canada (CAN/CSA-C22.2 NO. 60079-0, CAN/CSA-C22.2 NO. 60079-1, CAN/CSA-C22.2 NO. 60079-31) (not available for 100Vac and 220Vac versions)

EAC Ex (TR CU 012/2011) (not available for 100Vac and 220Vac versions)

INMETRO (ABNT NBR IEC 60079-0, ABNT NBR IEC 60079-1, ABNT NBR IEC 60079-31) (not available for 100Vac and 220Vac versions)

KCs (Employment and labor department 2020-33)

For further details on certifications and markings, consult the relevant table.

CERTIFICATIONS - MARINE APPLICATIONS

Lloyd's Register Marine Type Approval certification (with MAXIMUS MBX communication box or with FM1010 filter):

Test Specification Number 1 (ENV1, ENV2, ENV3, ENV5)

Electromagnetic compatibility: EN60945

Salty fog resistance: EN60068-2-52

ACCESSORIES	
WASEX2T4AT	Tank 10I (2.6gal) with integrated manual pump controlled by ATEX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4GOR	Tank 10l (2.6gal) with integrated manual pump controlled by EAC EX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4IN	Tank 10l (2.6gal) with integrated manual pump controlled by INMETRO certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
MBX1MAA	Explosion-proof communication box in stainless steel, IN 230Vac, with EMC filter for marine certification
MBX2MAA	Explosion-proof communication box in stainless steel, IN 24Vac, with EMC filter for marine certification
MBX3MAA	Explosion-proof communication box in stainless steel, IN 120Vac, with EMC filter for marine certification
MBA1S5A	Explosion-proof communication box in aluminium, IN 230Vac
MBA2S5A	Explosion-proof communication box in aluminium, IN 24Vac
MBA3S5A	Explosion-proof communication box in aluminium, IN 120Vac
OCTEX3/4C	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXA3/4C	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEXB3/4P	Barrier cable gland in nickel-plated brass EX 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXBA3/4P	Barrier cable gland in nickel-plated brass EX 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEX3/4	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, unarmoured cable ATEX
OCTEXA3/4	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, armoured cable ATEX
OCTEX1/2-3/4P	Cable glands reduction in nickel-plated brass Ex 3/4" - 1/2" NPT IECEX-ATEX-EAC Ex
OCTEXP3/4C	Conduit cable gland nickel-plated brass 3/4" NPT IECEX-ATEX- c CSA us - EAC Ex (operating temperature: from -60°C (-76°F) up to $+80$ °C (+176°F))
OEXPLUG1/2P	Plug EX 1/2" NPT IECEX-ATEX-EAC Ex
OEXPLUG3/4P	Plug EX 3/4" NPT IECEX-ATEX-EAC Ex
FM1010	EMC filter for Marine certification
MPX2CABLARM4	Cabling for MAXIMUS MPX SERIES2, 4m (13.1ft), armoured cable, barrier cable gland: 1 Ethernet cable, 3 power supply conductors, 7 conductors for alarms and relay
MPX2CABL4	Cabling for MAXIMUS MPX SERIES2, 4m (13.1ft), unarmoured cable, barrier cable gland: 1 Ethernet cable, 3 power supply conductors, 10 conductors for alarms and relay
MPX2CABLARM10	Cabling for MAXIMUS MPX SERIES2, 10m (32.8ft), armoured cable, barrier cable gland: 1 Ethernet cable, 3 power supply conductors, 7 conductors for alarms and relay
MPX2CABL10	Cabling for MAXIMUS MPX SERIES2, 10m (32.8ft), unarmoured cable, barrier cable gland: 1 Ethernet cable, 3 power supply conductors, 10 conductors for alarms and relay

For further details about cable glands part numbers, please refer to the relevant table.

BRACKETS AND	D ADAPTORS				
MPXCW	AISI 316L st	AISI 316L stainless steel corner adapter module			
MPXWBA	AISI 316L st	ainless steel wall bracket			
MPXCOL	AISI 316L st	ainless steel pole adapter mod	ule		
MPXWBTA	AISI 316L st	AISI 316L stainless steel parapet or ceiling mounting bracket			
PACKAGE					
Model Number	Weight	Dimensions (WxHxL)	Master carton		
MPXHD*****C	29kg (64lb)	50x42x26cm (19.7x16.5x10.2in)	-		

Part number	Certification	Marking	Ambient temperature	Cable entry temperature
MPXHD1*A0**C, MPXHD2*A0**C,	ATEX	© II 2 G Ex db IIC T6T5 Gb © II 2D Ex tb IIIC T85°CT100°C Db	-40°C ≤ Ta ≤ +60°C or +70°C	80°C
MPXHD3*A0**C	IECEx	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db		
	EAC Ex	1Ex d IICT6T5 Gb X Ex tb IIICT85°CT100°C Db X		
	INMETRO	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db		
	KCs	Ex d IICT6T5 Ex tb IIICT85°CT100°C		
	UL Hazardous Location America	Class I, Zone 1, AEx db IIC T6T5 Gb Zone 21, AEx tb IIIC T85°CT100°C Db Class I, Div 2, Group A, B, C, D T6T5 Class II, Div 2, Group F, G T6T5		80°C with Ta = 69°C 81°C with Ta = 70°C
	UL Hazardous Location Canada	Ex db IICT6T5 Gb X Ex tb IIIC T85°CT100°C Db X Class I, Div 2, Group A, B, C, DT6T5 Class II, Div 2, Group F, GT6T5		
MPXHD5*A0**C, MPXHD6*A0**C	ATEX			
	IECEx	Ex db IICT6T5 Gb Ex tb IIICT85°CT100°C Db		
	KCs	Ex d IICT6T5 Ex tb IIICT85°CT100°C		
MPXHD1*D0**C, MPXHD2*D0**C,	ATEX	᠍ II 2G Ex db IIC T4 Gb ☑ II 2D Ex tb IIIC T135°C Db	-40°C ≤ Ta ≤ +80°C	90°C
MPXHD3*D0**C	IECEx	Ex db IICT4 Gb Ex tb IIICT135°C Db		
	EAC Ex	1Ex d IICT4 Gb X Ex tb IIICT135°C Db X		
	INMETRO	Ex db IICT4 Gb Ex tb IIICT135°C Db		
	KCs	Ex d IICT4 Ex tb IIICT135°C		
MPXHD5*D0**C, MPXHD6*D0**C	ATEX	© II 2G Ex db IIC T4 Gb © II 2D Ex tb IIIC T135°C Db		
	IECEx	Ex db IIC T4 Gb Ex tb IIIC T135°C Db		
	KCs	Ex d IICT4 Ex tb IIICT135°C		
MPXHD1*CV**C, MPXHD2*CV**C, MPXHD3*CV**C	ATEX		-40°C ≤ Ta ≤ +50°C or +60°C	80℃
	IECEx	Ex db IICT5T4 Gb Ex tb IIICT100°CT135°C Db		
	KCs	Ex d IICT5T4 Ex tb IIICT100°CT135°C		
	UL Hazardous Location America	Class I, Zone 1, AEx db IICT5T4 Gb Zone 21, AEx tb IIICT100°CT135°C Db Class I, Div 2, Group A, B, C, DT5T4 Class II, Div 2, Group F, GT5T4	-40°C ≤ Ta ≤ +50°C or +55°C	
	UL Hazardous Location Canada	Ex db IIC T5T4 Gb X Ex tb IIIC T100°CT135°C Db X Class I, Div 2, Group A, B, C, D T5T4 Class II, Div 2, Group F, G T5T4		
MPXHD5*CV**C, MPXHD6*CV**C	ATEX		-40°C ≤ Ta ≤ +50°C or +60°C	
	IECEx	Ex db IIC T5T4 Gb Ex tb IIIC T100°CT135°C Db		
	KCs	Ex d IIC T5T4 Ex tb IIIC T100°CT135°C		

CABLE GLANDS AND ACCESSORIES 3/4" NPT						
Туре	Certification	Operating temperature	Cable	Model Number	Diameter of the external cable	Under armor cable diameter
Barrier cable gland	IECEX/ATEX/EAC Ex	-60°C (-76°F) / +135°C (+275°F)	Unarmoured cable	OCTEXB3/4P	17.8 - 20.0mm (0.70-0.79in)	-
			Armoured cable	OCTEXBA3/4P	16.8 - 23.9mm (0.66-0.94in)	20mm (0.79in) max
Cable gland with gasket	IECEX/ATEX/EAC Ex	-60°C (-76°F) / +100°C (+212°F)	Unarmoured cable	OCTEX3/4C	13.0 - 20.2mm (0.51-0.79in)	_
		-60°C (-76°F) / +80°C (+176°F)	Armoured cable	OCTEXA3/4C	16.9 - 26.0mm (0.66-1.02in)	11.1 - 19.7mm (0.44 - 0.78in)
	ATEX	-40°C (-40°F) / +100°C (+212°F)	Unarmoured cable	OCTEX3/4	14.0 - 17.0mm (0.55-0.67in)	_
			Armoured cable	OCTEXA3/4	18.0 - 23.0mm (0.71-0.91in)	14 - 17mm (0.55 - 0.67in)
Plug EX 3/4"NPT	IECEX/ATEX/EAC Ex	-100°C (-148°F) / +400°C (+752°F)	-	OEXPLUG3/4P	-	-
Conduit sealing fitting	IECEX-ATEX- c CSA us - EAC Ex	-60°C (-76°F) / +80°C (+176°F)	-	OCTEXP3/4C	-	-
Reduction 3/4" NPT x 1/2" NPT	IECEX/ATEX/EAC Ex	-100°C (-148°F) / +400°C (+752°F)	_	OCTEX1/2-3/4P	_	_

MAXIMUS MPX SERIES2 WITH DELUX TECHNOLOGY - CONFIGURATION OPTIONS							
	Voltage	Camera	Temperature class and ambient temperature	Video analytics	ONVIF Profiles		
MPXHD	1 230Vac	1 Super low-light Day/ Night camera, FULL HD 1080p, 30x, with DELUX technology	A T6T5 -40°C/+60°C or +70°C	Without integrated video analytics (without VIDEOTEC ANALYTICS)	OO Complies with ONVIF, Profile Q, Profile S and Profile T	C	
	2 24Vac		D T4 -40°C/+80°C	With integrated video analytics (VIDEOTEC ANALYTICS)	O1 Complies with ONVIF, Profile S and Profile T		
	3 120Vac		C T5T4 -40°C/+55°C or +60°C				
	5 220Vac						
	6 100Vac						

Not all combinations are possible.

TECHNICAL DRAWINGS

The indicated measurements are expressed in millimetres.





