

Smart Telereturns

Security & Surveillance Product Portfolio NEW "NT" SERIES (An Intelligent IP Solution)

## **ABOUT SYNTEL**



- Syntel The Telecom Division of Arvind Limited is a flagship Company of the Ahmedabad based Lalbhai Group; one of India's most respected industrial houses.
- Syntel, commenced its operations in 1989 as a CDoT (Centre for Development of Telematics) licensee for digital public and private switching equipment, has leveraged its distribution infrastructure in SMB (Small & Medium Enterprises segment offering a range of Voice and Visual communication technology solutions.
- Syntel recently acquired the business of Enkay Technologies aiming MLB undertaking large system integration projects based on Converged Technologies.

## **ABOUT SYNTEL**

- Syntel has more than 4.5 million installed lines in the PBX segment in India and is selling > 50,000 lines every month through a network of 300 + partners and an Enterprise Direct business team of 22+ seasoned professionals spread across the country.
- From a pure voice offering Company, Syntel has evolved and now offers solutions in Enterprise Communication, IT Infra & Automation, AV Integration & Automation and Security & Surveillance space from leading global technology partners like Cisco, Alcatel, NEC & Polycom. Syntel also offers communication solutions under its own brand as Neos, Neos Max, Neos Infinity as well as Security & Surveillance solutions under Syntel brand.
- To add value to & differentiate its offerings, Syntel has invested its own Software Applications Development Team, which
  offers customized solutions closely integrated with different verticals including ALE.
- Syntel is now poised to offer a complete suite of Voice, Data, Video ,Security & Surveillance solutions through a SINGLE WINDOW for a host of Industry verticals.

## **ABOUT SYNTEL**

#### **SYNTEL** Smart Telereturns



- Syntel is TTSL & TTML's exclusive partner for Wireless Telephony Solutions
- Syntel is Airtel's preferred partner for their Digital Telephony Solutions (PRI)
- Syntel also has strategic tie-ups in place with other Voice & Data service providers like Reliance, Vodafone, etc., to offer solutions to customers with specific preferences



TATA TELESERVICES LIMITED





## **ABOUT SYNTEL -Products**



ENTERPRISE COMMUNICATION NEC







VIDEO CONFERENCE		Yealink
IP Phones	atcom	

## NT SERIES PRODUCT PORTFOLIO

**Advance Features & Technology Highlights** 



#### **Technology Highlight**

## Smart Telereturns



**TVP** Transcendent Video Processing



J.

Intelligent Coding/Image/Alarm

Clear Face Image Accurate Motion detection for Human Body



Super Starlight Color: 0.0004Lux



Plugin Free No ActiveX



Human/Vehicle Classification Less False Alarm

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AEW Auto-tracking Early Warning

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Face Capture High Capture Rate





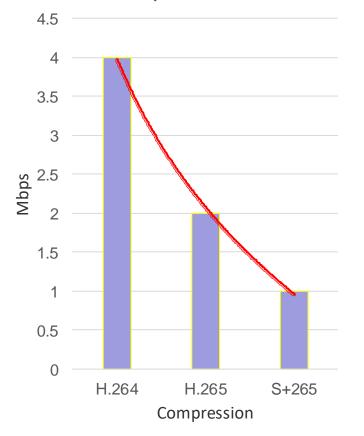
Face Recognition High Accuracy Full Solution

### Compression

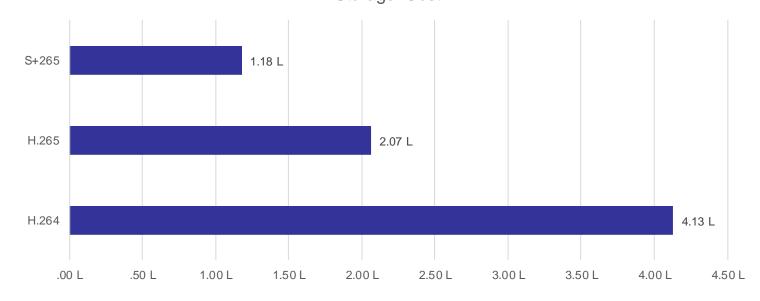
## Smart Telereturns

#### Extraordinary S+265 Compression

Compression



S+265 is an important Technology with independent intellectual property right, through coding production and sensitive algorithm it reduce the code rate by more than 30% to 40% compared with H.265 and reduce the code rate by more than 70% to 80% than h.264 to achieve the purpose of saving bandwidth and storage space.



Compressi				Backup	Storage in	Number of	
on	Resolution	Bitrate	Camera	Required	ТВ	10TB HDD	<b>Cost of HDD</b>
H.264	2MP 1080P	4Mbps	100	30 days	133 TB	14	413000
H.265	2MP 1080P	2Mbps	100	30 days	67TB	7	206500
S+265	2MP 1080P	1Mbps	100	30 days	34TB	4	118000

Note Each HDD cost consider as Rs. 29500/-

## **Image Quality**

## Smart Telereturns

#### Super Starlight Series

Highly sensitive star-lever sensor, in combination with time and space bilated noise reduction technology, provides excellent image quality even in such low illumination as 0.0008 without trailing



#### **TVP** Technology

Transcendent Video Processing algorithm uses low-light enhancement algorithm to not only allow more light to enter the camera in low illumination scenes, reduce noise, improve overall picture brightness, but also weaken excessive bright light, and avoid over-exposure of single pixel.

- Sensitivity 85%
- SNR 25%
- No Trailed Image of moving object



## **Image Quality**



Ultra High Definition Series

#### Having a range of cameras of 2MP, 4MP, 5MP, 8MP, 12MP

#### Excellent WDR

#### WDR Start From 100dB



## **Image Quality**

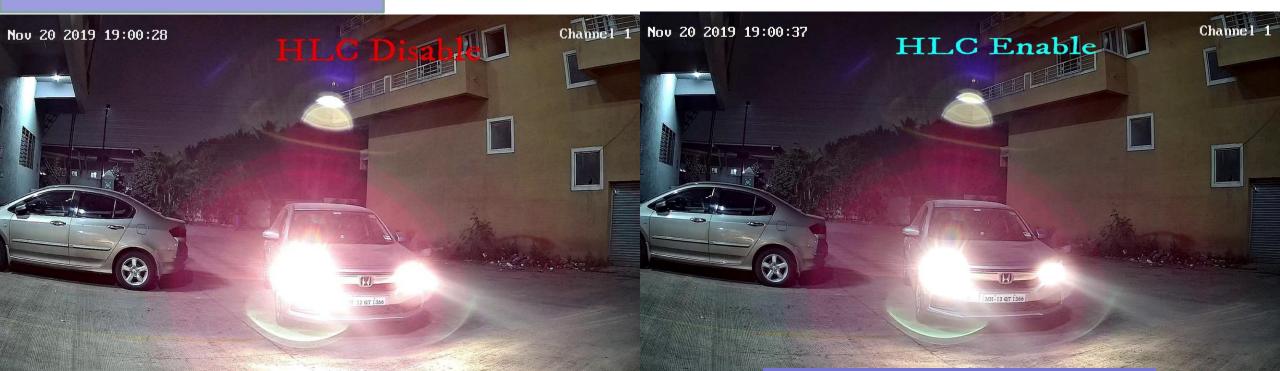


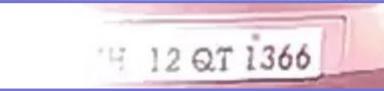
Smart Defog

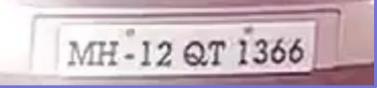
Restoring clear images in hazy and foggy weather

HLC

Improving the Image Visibility under strong light Source







## **Intelligent Smart Functions**





Intelligent coding is an optimization of S+265 Coding. When turn on intelligent coding function, the minimum stream of static scene in 1920\*1080 resolution can reach to 256 kbsp and consume storage space is 3GB/day.

### Intelligent Image

**Intelligent Coding** 



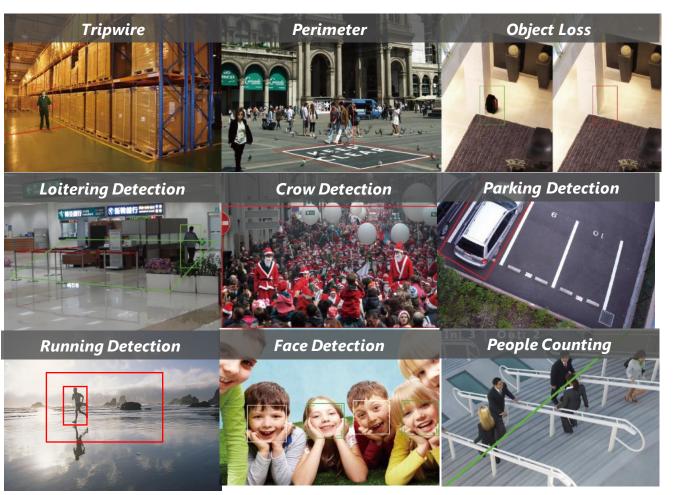
Based on human body detection technology in chips, intelligent image optimizes facial image and ensures image clarity under low stream and complex illumination condition.

#### Intelligent Alarm

Enhance motion detection accuracy for human body by intelligent chip

## **Intelligent Smart Functions-VCA**

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- Tripwire
- Double tripwire
- Perimeter
- Object missing
- Object left
- People running
- People loiter
- Illegal parking
- Guard

- Facial detection
- People Counting
- People crowd
- People on duty
- Image unfocussed

detection

- Scene change detection
- Audio abnormal

detection

• Auto tracking

#### Technology Highlight – Brief

### **AEW : Early Warning Detection**

Based on AI deep learning AEW (auto tracking early warning) is the combination of light warning and audio warning. achieving the effect of prevention Midway intervention and post event investigation it can precisely differentiate vehicle from people and warn people or vehicle respectively thus increasing the accuracy and availability of warning compared with traditional open CCTV.





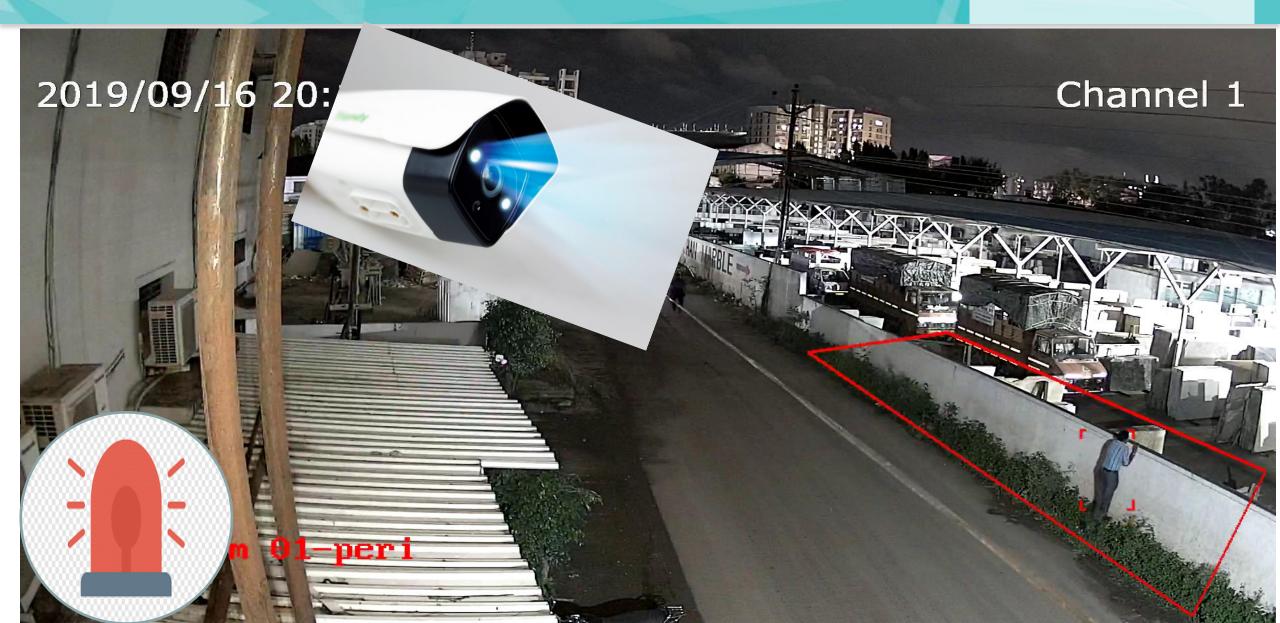










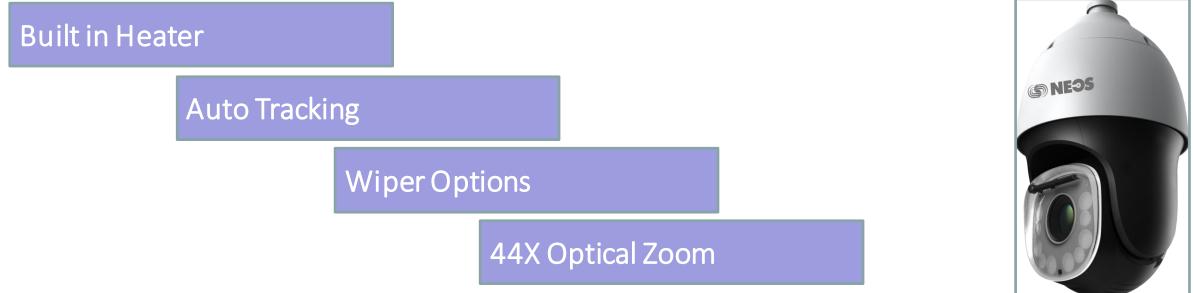


## **Intelligent Smart Functions PTZ**



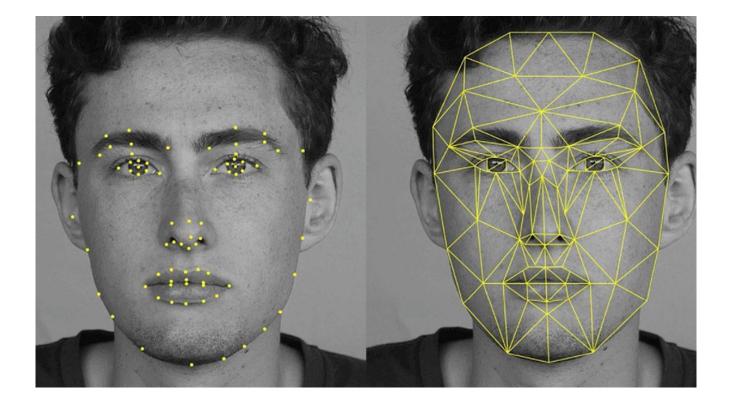
#### Panoramic PTZ with Lowest illumination 0.0008lux Provide 24hours full colourful image





#### Technology Highlight – FR





## Face Recognition Solution

## What's Special ?



**Advantages Of Face Recognition Solution** 



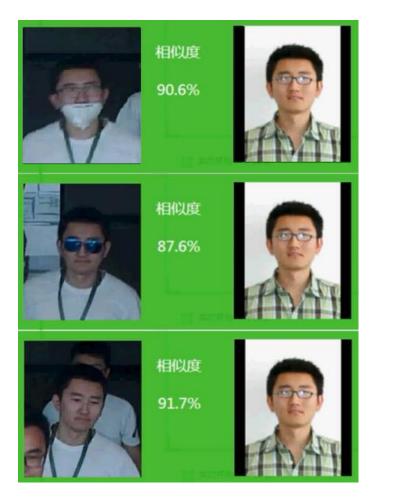
Cooperation with world-class chip manufacturers
Trained algorithm with enough data
Open for integration

Maturing algorithm which had been used in many big projects

· Provide pictures with high quality

## What's Special ?



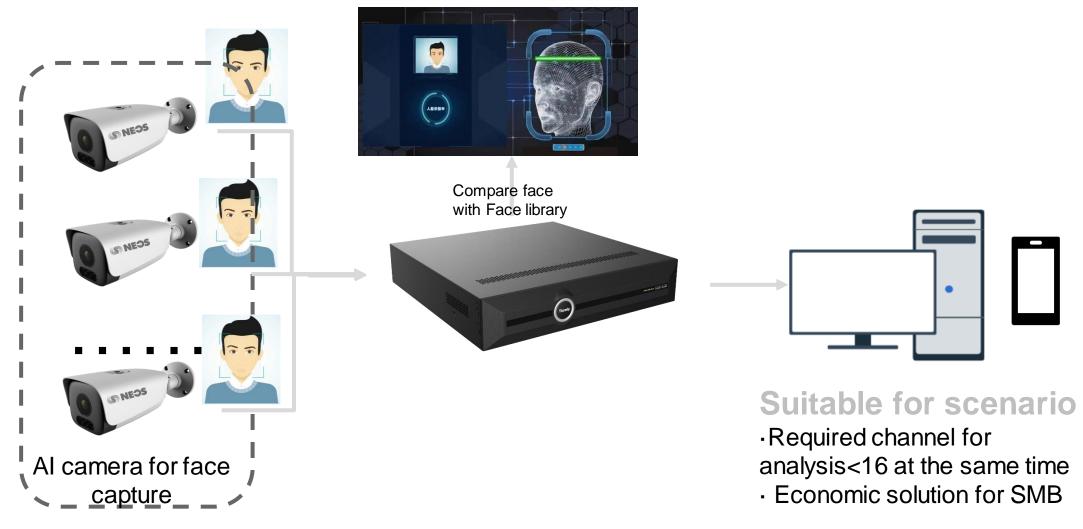


## **Camouflage detection**

face recognition system supports recognize various facial characteristics. People in mask, sunglasses won't affect accuracy of facial recognition.

## SOLUTION FEATURES

## Smart Telereturns



Collaborative analysis solution

## Face Recognition

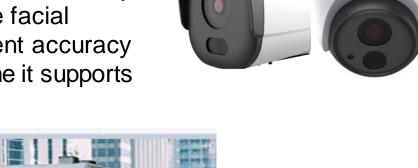
**Technology Highlight – Brief** 

face capture camera which starlight technology achieves face capture up to 15 people in one snap by Deep learning Technology reaching the accuracy rate over 97% besides the face recognition camera support the facial recognition up 32 database for 5000 faces keeping the alignment accuracy greater than 95% configured with three level precaution scheme it supports multiple alarm linkage for variety of applications

> Starlight Multi-mode Available Plugin Free Face capture/Recognition Video Analysis



S NEOS





### **Network Video Recorder**

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#### Product Introduction to NVR







1HDD NVR

2HDD NVR

4HDD NVR







24HDD NVR

8HDD NVR

16HDD NVR

#### Technology Highlight – Extra Channel in NVR

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We are offering some extra channels in NVR as compare to industry standard/competition which helps the end users to connect some additional cameras as similar/lower prices as compare to competition



Industry Standard	<b>SNEOS Offering</b>	<b>Benefit/Extra Channel</b>	%
4CH	5CH	1CH Extra	
8CH	10CH	2CHExtra	
16Ch	20CH	4CH Extra	25%
32CH	40CH	8CH Extra	Extra
64Ch	80CH	16CH Extra	
128CH	160CH	32CH Extra	
256CH	320CH	64CH Extra	

## **Robust Coding & Decoding Performance**

Extraordinary S+265 Compression

Saving up to 70% to 80% Bandwidth and storage compare to H.264

Up to 4K High Resolution Recording

Supporting ultra high definition video Recording

Up to 4K High Resolution Output

Supporting ultra high definition video Viewing Experience



**Features** 

Smart Telereturns

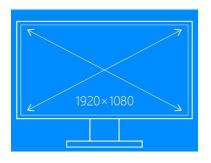
Plus & Play Options /One Key to add

Cameras can configure auto or by single click

Self Adaptive Resolution

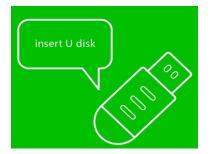
No need to setup manually





Simplified backup

Auto Prompt on USB connect for quick backup



**Features** 



No Active-X Required

Support All Browsers

Dual Gigabit Ethernet ports

Dual Network/Load balancing/Redundancy (4HDD & Above)

Multiple Display Output

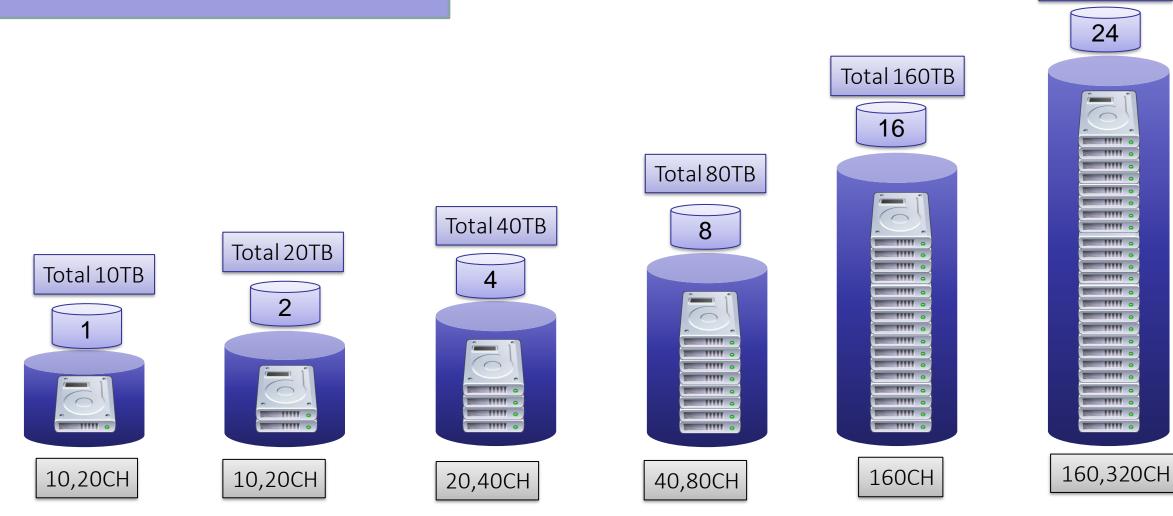
Support up to 4 Display Output in 8HDD and above NVRs

## **Smart Storage**



Total 240TB

Multiple Storage Options



## **Smart Storage**

connectine

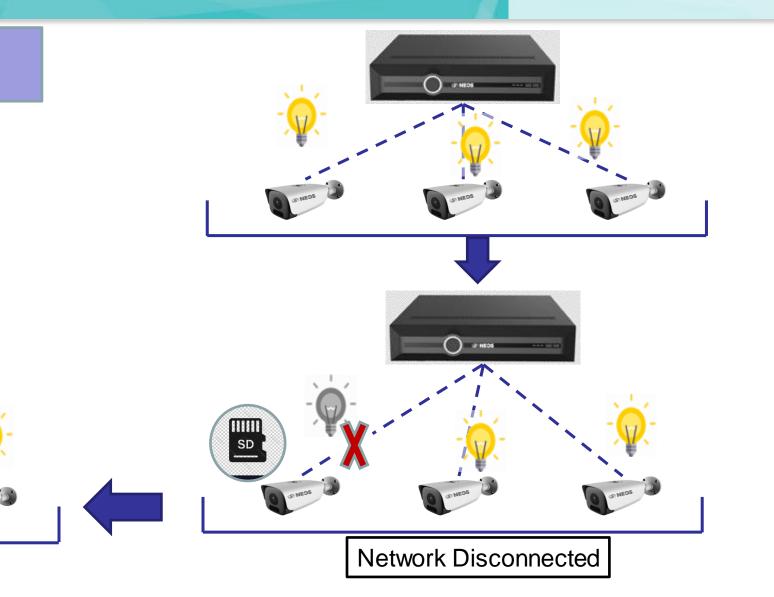
## Smart Telereturns

#### ANR

Automatic Network Replenishment for reliable & Flexible Storage

Recorded data transmitted back

\*\*\* 101 10



### **Smart Storage**



#### RAID Up to RAID 60

Redundant Array of independent disk for more reliability

**Dual Stream Recording** 

Record only primary + Secondary or only primary or only secondary stream

Disk Groups

Dividing disk into different group or different storage needs

### **Operational Features**

Support Onvif with Profile G, Profile S, Profile T options

Optimize HDD Installation space

Innovative design to optimize the HDD space

Support VCA

- •Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/Loitering/Parking/Crowd Counting/Face detection/people counting/Audio abnormal detection/video abnormal detection/Early Warning
  - •\*FR Model Support Facial Recognition

### Comprehensive Integration







### Strong CMS Software





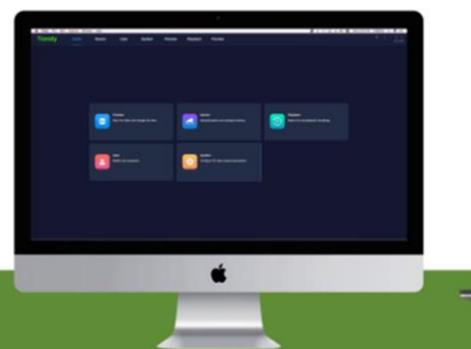
#### SNEOS Smart Client for MAC



#### **SNEOS** Netvideo-Express



#### **SNEOS Netvideo Professional**





The CMS Software Support function like preview, playback, alarm, attendance, TV wall, E-map etc. and configuration like device management, user management, Storage, event etc.

Netvideo Smart	Netvideo Profession			
Free to use	License Required			
Up to 200 IP Device or 512 Channel	Up to 200 IP Device or 700 Channel			
Only Support SNEOS Device	Support SNEOS + ONVIF			
Support Adding by P2P, IP, Domain	Support Adding by P2P, IP, Domain			

## Strong CMS Software



#### Operation





Preview

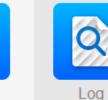
Playback



TV Wall

íl6











E-Map



**Face Detection** 



Behavior





**M**H









Storage Status







Access Control





Person Flow

Tripwire

Face Snapshot

Heatmap

Attendance

Attendance



## Strong CMS Software



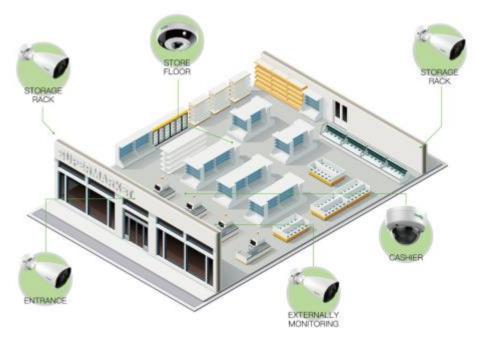
#### Configuration

Device	Information	Event	TV Wall Setup	Guard Setup	User	System	Storage	Keyboard	
Cruise	Decoder Setup	Personnel							
device/group adding, delete and edit						[admin] CPU 10% RAM	1 73%   09:09:42		

Status

#### Vertical Solution





#### Retail

- Fisheye : 12MP/Panoramic/Heatmap
- Face Detection
- Super Starlight camera for night view
- 4K H.265 Management NVR

## Factory/Manufacturing

- Exclusive AWE solution, person-vehicle classification, pre-war
- Leading super-starlight technology, high quality night vision
- Full series VCA function, more than 10 types
- New Fisheye panoramic camera, with auto tracking facilities
- Autotracking PTZ

#### Vertical Solution

# Smart Telereturns



#### Hospital

- 24h full color image
- Save 70% storage with S+265
- Perimeter alarm for hospital
- FR for registration office/authorized entry
- Remote monitoring for ICU
- Parking lot monitoring
- Auto tracking

### Campus

- 24h full color image
- Save 70% storage with S+265
- Perimeter alarm for Campus
- FR for registration office/authorized ent
- Remote monitoring for Campus
- 2way Audio solution
- Auto tracking



### **Product Portfolio-Products**



**Full Range of Product** 



### 2mp~12mp IPC

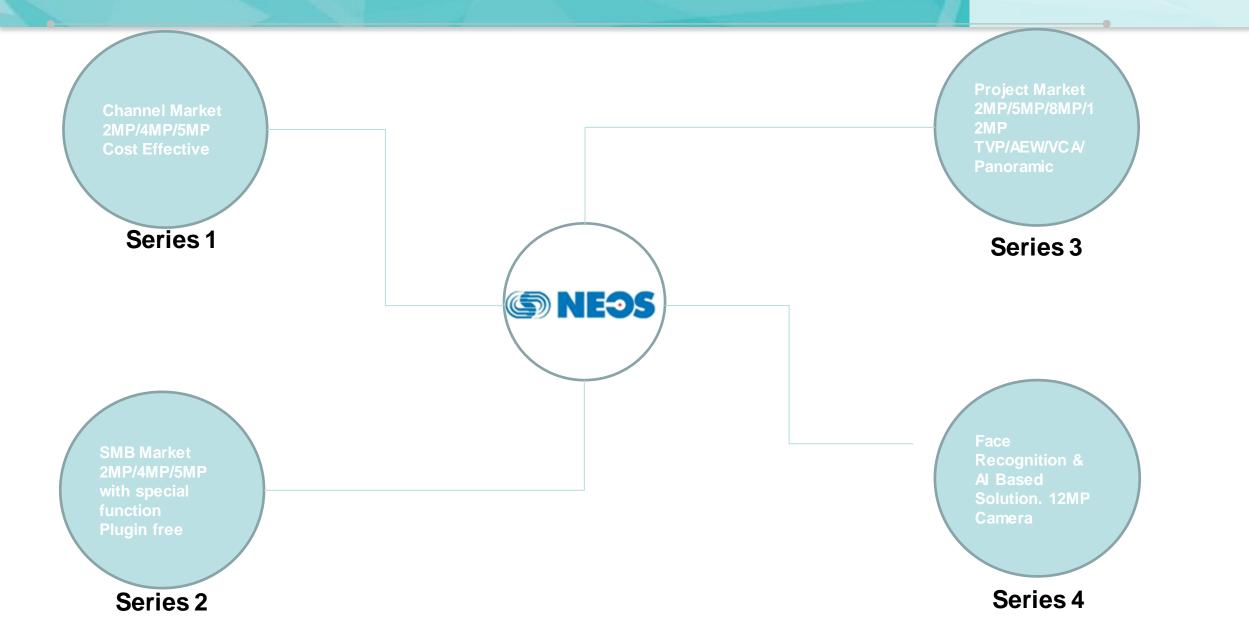
4X-44X PTZ

### 5CH to 320CH NVR

Strong CMS Software

### **Product Portfolio-Product Range**





# **Model Number Understanding - Camera**



	Model Number														
														SF-	
Back	End		Туре	Product	Туер	Technolo	gy	Se	ries	Resolu	tion	SF- Len Type		Other	
N	T	-	I	Dome	D	Normal	N	Lite	1	2MP	2	Fixed		EW	E
														Auto	
Back	Back	-	IP	Bullet	В	Starlight	S	Pro	2	3MP	3	Manual VF	V	Tracking	AT
						Super									
		-		Box	Х	Starlight	Р	Ultra	3	4MP	4	Motorized VF	М	W	Wiper
					-		_	_			_				
		-		PTZ	P	Facial Series	F	Face	4	5MP	5				
		-		Vandal D						8MP	8				
		-		Fisheye	F					12MP					
				1 1			Specific	ation		1					
				Special		Special									
IR Dista	ance	PC	DE	Features		Features		Special	Features	Special F	eature	es Ler	าร		
										Early					
10M	1	POE	Р	Audio	Α	SD	S	Alarm	R	Warning	E		2.8MM		
20M	12												4MM		
30M	13												6MM		
													2.8-		
40M	4												12MM		
50M	15														
80M	18														

# **Model Number Understanding - NVR**

							NV	R						
	MODEL NUMBER													
Back	Back End Typ				Series		HDDCA	APACITY	CHANNEL		POE NVR			
Ν	Т	-	I	Ν	Lite	1	1	1	5	5	POE NVR	Р		
Back	Back	-	IP		Pro	2	2	2	10	10				
		-			Ultra	3	4	4	20	20				
		-			Face	4	8	8	40	40				
		-					16	16	80	80				
		-					24	24	160	160				
							SPECIFIC	ATION		1			 	
Seri	es	RESOL SUPF	UTION PORT		NNEL ACITY									
Lite	1	2MP	2MP	5	5									
Pro	2	4MP	4MP	10	10									
Ultra	3	5MP	5MP	20	20									
Face	4	12MP	12MP	40	40									
				80	80									
				160	160									

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### **Product Portfolio- 1 Series**



	Resolution	2MP	4MP	5MP	8MP
	Lens	Fixed	Fixed	Fixed	Fixed
	S+265	ar und			
IPC	S+265 Starlight				
	S+265 Super Starlight	V)- (*****			

DT	Resolutio n		2	MP		
PT Z	S+265 Starlight	4x Po	E	20x PoF		25X Optical Zoom
	Hard Dr	ive			1HDD	
NVI	S+265 N	IVR	5ch/100	ch/20ch		00

# **Product Portfolio- Key Features of Products**

# Smart Telereturns

### **Regular Series**



- 2MP/4MP Resolution
- 100dB WDR
- Bullet IP67, Dome IP66
- Bullet 4MM Lens, Dome 2.8MM Lens
- IR distance Bullet 50M, Dome 30M
- Special Function like Intelligent Image, Intelligent Coding, Intelligent Alarm

### **Starlight Series**



- 5MP Resolution
- 120dB WDR
- Bullet IP67, Dome IP66
- Bullet 4MM Lens, Dome 2.8MM Lens
- IR distance Bullet 50M, Dome 30M
- Tripwire/Double Tripwire/Perimeter/Object Abandon/Object lost/Running/Loitering/Parking/Crowd Counting/Video Abnormal Detection, Facial Facial Recognition

### **Super Starlight Series**



- 2MP Resolution
- 120dBWDR
- Bullet IP67, Dome IP66
- Bullet 4MM Lens, Dome 2.8MM Lens
- IR distance Bullet 50M, Dome 30M

# **Product Portfolio- Key Features of Products**

# Smart Telereturns

### PTZ Series-4X



- Indoor Mini PTZ-Starlight 2MP
- 4X Optical Zoom and digital zoom
- Audio, SD card Support, Alarm Support
- IP66
- IR distance 30M, POE
- Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/ Crowded/ Video Abnormal /Audio Abnoraml/ Face Detection

### PTZ Series-20X



- 20X Optical Zoom and 16X digital zoom
- IP66
- IR distance 150M, POE
- Tripwire/ Double Tripwire/ Perimeter/ Object Abandon

### **PTZ Series-25X**

UP NEDS

- 4Inch PTZ Outdoor-Starlight 2MP
- 25X Optical Zoom and 16X digital zoom
- IP66
- IR distance 150M, POE
- Built in Heater, SD card Support, Audio Support, Alarm Support
- Tripwire/ Double Tripwire/ Perimeter/ Object Abandon

# **Product Portfolio- Key Features of Products**

# Smart Telereturns

### **NVR 1HDD Support**



- 5CH/10CH
- 40/40MbpsThroughput
- Recording resolution support up to 5MP
- All Browser Support, Support ANR
- 1\*RJ45, 2\*USB port Support
- Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd Counting/ Face detection/ people counting/ Audio abnormal detection/ video abnormal detection/ Early Warning

### **NVR 1HDD Support**



- 20CH
- 80/80MbpsThroughput
- Recording resolution support up 4K
- All Browser Support, Support ANR
- 1\*RJ45, 2\*USB port Support
- Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd Counting/ Face detection/ people counting/ Audio abnormal detection/ video abnormal detection/ Early Warning

# **Product Portfolio- 1 Series-Fixed Camera**

### 1 Series product will have 2MP, 4MP, 5MP Range

Model	NT-IBS15		NT-IDS15	NT-IBN14	NT-IDN14	NT-IBP12	NT-IDP12	NT-IBN12	NT-IDN12
Images			★ 👼		🖈		*		*
Image Sensor	1/2	2.8" CMOS	5	1/2.	B" CMOS	1/2.8"	CMOS	1/2	.8" CMOS
Resolution		5MP			4MP	21	ЛР		2MP
Min Illumination	Color : 0.002L B/W : 0.001Lu	- •			@ (F 2.0, AGC ON) @ (F 2.0, AGC ON)		@ (F 1.4, AGC ON) @ (F 1.4, AGC ON)		x @ (F 2.0, AGC ON) < @ (F 2.0, AGC ON)
Lens	4MM		2.8MM	4MM	2.8MM	4MM	2.8MM	4MM	2.8MM
Video Compression	S+265/H.2	65/H.264	/MJPEG	S+265/H.26	5/H.264/MJPEG	S+265/H.265/	/H.264/MJPEG	S+265/H.20	55/H.264/MJPEG
Frame Rate	<u>2560*</u>	<u>1920@20</u>	<u>IFPS</u>	<u>2560*1</u>	440@15FPS	<u>1920*108</u>	<u>30@30FPS</u>	<u>1920*1</u>	<u>1080@30FPS</u>
WDR		120dB		1	00dB	120	DdB		100dB
HLC		Y			Y		Y		Υ
Smart Defog		Y			Y	,	Y		Υ
VCA	Tri pwi re/Double Tri pwire/ Lost/Running/L Counti ng/Video Abnormal (Suggest Openi ng t	oitering/Pa Detection,	arking/Crowd Facial Facial Recognition		NA	Ν	IA		NA
Audio I/O		NA			NA	Ν	IA		NA
Alarm I/O		NA			NA	Ν	IA		NA
Memory Slot		NA			NA	Ν	IA		NA
System compatibility	Onvif (	Profile S)		Onvif	(Profile S)	Onvif ( I	Profile S)	Onvif	(Profile S)
IR Range	50M		30M	50M	30M	50M	30M	50M	30M
IR LED	2pcs Lattice		1pcs Lattice	2pcs Lattice	1pcs Lattice	2pcs Lattice	1pcs Lattice	2pcs Lattice	1pcs Lattice
Power Supply		12V, POE			2V, POE		V, POE		12V, POE
IP Protection	IP67		IP66	IP67	IP66	IP67	IP66	IP67	IP66

### **Product Portfolio- 1 Series- PTZ Camera**



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### **Product Portfolio- 1 Series- NVR's**



Model	NT-IN10105	NT-IN10110	NT-IN10120				
Specification	1/5M/40Mb	1/5M/40Mb	1/4K/80Mb				
Image	O						
Video Input	5-CH	10CH	20Ch				
Decoding Format	S+265/H.2	65/H.264	S+265/H.265/H.264				
Input/output Bandwidth	40Mbps/	40Mbps	80Mbps/80Mbps				
Recoridng Resolution	Upto	5MP	Up to 8MP				
Sync Playback	2*1080P	,4*720P	4*1080P,8*720P,1*8MP/5MP				
HDD ( SATA )	1H	DD	1 HDD				
E-SATA	N/	Ά	N/A				
RAID	N/	Ά	N/A				
Audio In	N/	Ά	N/A				
Audio Out	1xR	СА	1xRCA				
Alarm In/out	N/	Ά	N/A				
HDMI/VGA	1/1	СН	1/1 CH				
VCA	• • • •	r/ Object Abandon/ Object Lost/ Running, ng/ Audio abnormal detection/ video abn	/ Loitering/ Parking/ Crowd Counting/ Face ormal detection/ Early Warning				
Network Interface		1*RJ45 Network Interface					
Power Supply		12V DC					
Chassis		10					

# **Product Portfolio- 2 Series**



	Resolution		2MP		5N	/IP	81	/IP
	Lens	Fixed	Veri-Focal	Motorized	Fixed	Motorized	Fixed	Motorized
IPC	S+265	C HIS					NE	w
	S+265 Starlight	U MICS	S HES	THESE CONTRACTOR	UT NEDS		UT MICS	

	Hard Drive	2HDD	4HDD	8HDD		Resolution	21	ΛP	5MP
NVR	S+265 NVR	10ch/20ch	20ch/40ch	40ch/80ch	PTZ	S+265	20x PoE	33x PoE AutoTrack	30x,
	S+265 PoE NVR	10ch/20ch				Starlight	D		ð

# **Product Portfolio- 2 Series Fixed Camera**

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### 2 Series Products will have Fixed lens, Starlight 2MP & 5MP, SD card models

Model	NT-IBS25	NT-IDS25	NT-IBS22	NT-IDS22	NT-IDN22
Specification	13/P/S/4MM	12/P/A/S/2.8MM	13/P/S/4MM	12/P/A/S/2.8MM	12/P/A/S/2.8MM
Images		S MOS			
Image Sensor	1/2.5	3" CMOS	1/2.8	' CMOS	1/2.8" CMOS
Resolution	5MP	Starlight		tarlight	2MP
Min Illumination		k @ (F 1.6, AGC ON) k @ (F 1.6, AGC ON)		@ (F 2.0, AGC ON) @ (F 2.0, AGC ON)	Color:0.05Lux @ (F 2.0, AGC ON) B/W:0.01Lux @ (F 2.0, AGC ON)
Lens	4MM	2.8MM	4MM	2.8MM	2.8MM
Video Compression		5/H.264/MJPEG		2.5WW	H.265/H.264/MJPEG
Frame Rate		920@20FPS	•	80@30FPS	1920*1080@30FPS
WDR		20dB		0dB	100dB
HLC		Y	· · -	Y	Y
Corridor				Y	Y
		rimeter/Object Abandon/Object tering/Parking/Crowd		Perimeter/Object Abandon/ oitering/ Parking/ Crowd	Tripwire/ Double Tripwire / Perimeter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd detection/ Video Abnormal Detection/ People Counting/ Face
VCA		Abnormal Detection		bnormal Detection	Detection (In HD Mode)
Audio I/O	NA	Mic In	NA	Mic In	Mic In
Alarm I/O		NA	Ν	A	NA
Memory Slot	YES up	o to 128GB	YES up t	to 128GB	YES up to 128GB
System compatibility	Onvif ( P	rofile S),CGI	Onvif ( Pro	ofile S),CGI	Onvif ( Profile S),CGI
IR Range	30M	20M	50M	20M	20M
IR LED	2pcs Lattice	8 pcs Array	2pcs Lattice	8 pcs Array	8 pcs Array
Power Supply	ly DC12V, POE		DC12	V, POE	DC12V, POE
			TVS 6000V, Lightning Surge Protection: ( power 2000V, RJ45 1000V)		
Circuit Protection		Protection: ( power 2000V, RJ45 D00V) IP66 IK10			TVS 6000V, Lightning Surge Protection: (power 2000V, RJ45 1000V) IP66 IK10

# **Product Portfolio- 2 Series Fixed Camera**

### 2 Series Products will have VF Lens model Manual VF, Motorized Lens, Special Function

Model	NT-IBS25M	NT-IDS25M	NT-IBS22M	NT-IDS22M	NT-IBN22M	NT-IDN22M	NT-IBN22V	NT-IDN22V
Specification	15/P/A/S/R/2.8-12MM	13/P/A/S/R/2.8-12MM	15/P/A/S/R/2.8-12MM	13/P/A/S/R/2.8-12MM	15/P/A/S/R/2.8-12MM	13/P/A/S/R/2.8-12MM	15/P/A/S/R/2.8-12MM	13/P/A/S/R/2.8-12MM
Images	() m							*
Image Sensor	1/2.8"(	CMOS	1/2.8	'CMOS	1/2.8	"CMOS	1/2.8"	CMOS
Resolution	5MP Starlight	Motorized	2MP Starlight Motorized		2MP Motorized		2MP V	/F Lens
Min Illumination	Color:0.002Lux@		Color: 0.002Lux@ (F 1.6, AGC ON)		Color : 0.05Lux @ (F 1.4, AGC ON)		Color : 0.05Lux @	🦻 (F 1.4, AGC ON)
	B/W : 0.001Lux @	(F 1.6, AGC ON)		@ (F 1.6, AGC ON)	· · · ·	(F 1.4, AGC ON)	· · · ·	(F 1.4, AGC ON)
Lens	2.8-12MM Mote		2.8-12MM Mo	otorized VF Lens	2.8-12MM M	otorized VF Lens	2.8-12MM M	lanual VF Lens
Video Compression	H.265/H.26	64/MJPEG	S+265/H.265	/H.264/MJPEG	S+265/H.265	5/H.264/MJPEG	S+265/H.265/	/H.264/MJPEG
Frame Rate	<u>2560*1920</u>	<u>)@20FPS</u>	<u>1920*10</u>	<u>80@30FPS</u>	<u>1920*10</u>	<u>80@30FPS</u>	<u>1920*108</u>	<u>30@30FPS</u>
WDR	1200	dB	14	OdB	10	OdB	100	)dB
HLC	Υ			γ		Y	Y Y	Y
Smart Defog	Υ		Y			Y		Y
Corridor	Y			Υ		Y	Y	Y
VCA	Tripwire/DoubleTripw Abandon/ObjectLost/Runnin Counting/VideoAb	g/Loitering/Parking/Crowd	Abando Lost/Running/Loite	wire/Perimeter/Object on/Object ering/Parking/Crowd Abnormal Detection	Tripwire	/Perimeter	Tripwire/	Perimeter
Audio I/O	1/1CH	1/1 Mic In	1/1CH	1/1 Mic In	1/1CH	1/1 Mic In	1/1CH	1/1 Mic In
Alarm I/O	2/10	СН	2/:	1 CH	1/0CH	2/1 CH	1/0CH	2/1 CH
Memory Slot	YES up to	128GB	YES up t	to 128GB	YES up	to 128GB	YES up to	o 128GB
USB	10	1	1	СН	1CH	NA	1CH	NA
Reset Button	Υ			γ		Y	\Y	<u> </u>
RS 485	Υ			γ	NA	NA	NA	NA
System compatibility	Onvif (Profile S),CGI		Onvif ( Pr	ofile S),CGI	Onvif ( Pi	rofile S),CGI	Onvif ( Pro	ofile S),CGI
IR Range	50M	30M	50M	30M	50M	30M	50M	30M
IR LED	54 pcs Array	32pcs Array	54 pcs Array	32pcs Array	54 pcs Array	32pcs Array	54 pcs Array	32pcs Array
Power Supply	DC12V, POE		DC12	V, POE	DC12V, POE		DC12	V, POE
<b>Circuit Protection</b>	TVS 6000V, Lightning Surge Protection: (power 2000V, RJ45 1000V)		TVS 6000V, Lightning Surge Protection: (power 2000V, RJ45 1000V)		TVS 6000V, Lightning Surge Protection: (power 2000V, RJ45 1000V)		TVS 6000V, Lightning Surge Protection: (power 2000V, RJ45 1000V)	
IP Protection	IP67	IP66 IK10	IP67	IP66 IK10	IP67	IP66 IK10	IP67	IP66 IK10

# **Product Portfolio- 2 Series PTZ**



Model	NT-IPS22	NT-IPS22AT	NT-IPS25
Specification	I15/P/S/20X	I15/P/33X/AT	I40/P/30X
Images			
Image Sensor	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	2MP Starlight 20X	2MP Starlight 33X Auto Tracking	5MP Starlight 30X
Min Illumination	Color : 0.002Lux @ (F 1.4, AGC ON) B/W : 0 lux with IR	Color : 0.002Lux @ (F 1.5, AGC ON) B/W : 0 lux with IR	Color : 0.002Lux @ (F 1.5, AGC ON) B/W : 0 lux with IR
Optical Zoom	20X	33X	30X
Digital Zoom	16X	16X	16X
Video Compression	S+265/H.265/H.264/MJPEG	S+265/H.265/H.264/MJPEG	S+265/H.265/H.264/MJPEG
Frame Rate	<u>1920*1080 @ 30FPS</u>	<u>1920*1080 @ 60FPS</u>	2560*1920@20FPS
WDR	140dB	140dB	Digital WDR
Cruise	4, up to 32 preset per cruise	16, up to 32 preset per cruise	16, up to 32 preset per cruise
Preset	500	500	500
Auto Tracking	N/A	γ	N/A
Early Warning	N/A	N/A	N/A
Video Enhancement	BLC/3D DNR/HLC	BLC/3D DNR/HLC	BLC/3D DNR/HLC
VCA	Tripwire/ Double Tripwire/ Perimeter/Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd/ Video Abnormal/ Audio Abnormal/ Heatmap	Tripwire/ Double Tripwire/ Perimeter/Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd/ Video Abnormal/ Audio Abnormal/ Heatmap	Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd/ Video Abnormal/ Audio Abnormal/ Heatmap/ Face Detection/ People Counting/ On Duty Detection
Audio I/O	1/1CH	1/1CH	1/1CH
Alarm I/O	1/1CH	1/1CH	1/1CH
Memory Slot	YES up to 128GB	YES up to 128GB	YES up to 128GB
System compatibility	Onvif ( Profile S),CGI,SDK	Onvif ( Profile S), CGI, SDK	Onvif (Profile S),CGI,SDK
IR LED	4pcs, 120M	4pcs, 150M	10pcs, 150M
White LED	2	2	NA
Power Supply	DC12V, POE+	DC24V, POE+	DC24V, POE+
IP Protection	IP66	IP66	IP66

# **Product Portfolio- 2 Series NVR**



Model	NT-IN20210	NT-IN20220	NT-IN20440	NT-IN20840	NT-IN20880			
Specification	2/4K/80Mb	2/4K/80Mb	2/12M/400Mb	2/12M/400Mb/RAID	2/12M/400Mb/RAID			
Image	0	0	-0	0	0			
Video Input	10CH	20CH	40CH	40CH	80CH			
Decoding Format			S+265/H.265/H.264					
Input/output Bandwidth	80Mbps/	/80Mbps		400Mbps/200Mbps				
Recoridng Resolution	Up to 8MP			Up to 12MP				
Sync Playback	4*1080P,8*720	P,1*8MP/5MP	16*1	L080P,32*720P,4*8MP/5MP,2*12	MP			
HDD ( SATA )	2 H	DD	4 HDD	8 HDD	8 HDD			
E-SATA	N,	Ά	N/A	1	1			
RAID	N,	Ά	N/A	Up to RAID 10	Up to RAID 10			
Audio In	10	Н		1CH				
Audio Out	1xR	CA		1xRCA				
Alarm In/out	0/1	СН		16/4 CH				
HDMI/VGA	1/1	СН	1/1 CH	2/2 CH	2/2 CH			
VCA	Tripwire/ Double Tripwire,	-	andon/ Object Lost/Running/Loitering/Parking/Crowd Counting/Face detection/ people countin pnormal detection/video abnormal detection/Early Warning					
Network Interface	1*RJ45 Netw	ork Interface	2*RJ45 Network Interface					
Power Supply	12V	DC	12V DC	AC 100	-240V			
Chassis	1	J	1.5U	21	J			

### **Product Portfolio- 3 Series**



	Resolution	2MP	5MP	8MP	12MP
	Lens	Motorized	Motorized	Motorized	Fix
	S+265 Starlight				Tiendy
IPC	S+265 Super Starlight	2 MS			

		Resolution	2MP	5MP	8MP/16MP		Hard Drive	16HDD	24HDD
PTZ	S+265 Starlight		30x		NVR		80ch	160ch/320ch	
	S+265 Super Starlight	44x AFW		44x/63x 180° 44x/63x 360°		S+265 NVR			

# **Product Portfolio- 3 Series Fixed Camera**

### 3 Series Products will have Special Camera Like 360 Degree Fish eye, Box Camera, Fixed Lens AEW Camera

Model	NT-IFN38	NT-IXT32	NT-IBT32E	NT-IBS35E
Specification	I2/P/A	NA/P/A/R	I5/P/A/R/4MM	I5/P/A/R/4MM
Images	U MEDS		(i) las	Co com
Image Sensor	1/1.7" CMOS	1/1.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	12.0MP	2MP Super Starlight	2MP Super Starlight AEW	5MP Starlight AEW
Min Illumination	Color : 0.05Lux @ (F 2.8, AGC ON) B/W : 0.01Lux @ (F 2.8, AGC ON)	Color : 0.0008Lux @ (F 1.2, AGC ON) B/W : 0.0001Lux @ (F 1.2 AGC ON)	Color:0.0008Lux @ (F 1.2, AGC ON) B/W:0.0001Lux @ (F 1.2 AGC ON)	Color:0.002Lux @ (F 1.6, AGC ON) B/W:0.001Lux @ (F 1.6 AGC ON)
Lens	2MM	NA	4MM	4MM
Video Compression	H.265/H.264/MJPEG	H.265/H.264/MJPEG	S+265/H.265/H.264/MJPEG	S+265/H.265/H.264/MJPEG
Frame Rate	4000*3027@20FPS	<u>1920*1080@60FPS</u>	<u>1920*1080@30FPS</u>	<u>2560*1920@20FPS</u>
WDR	100dB	140dB	140dB	120dB
HLC	Y	Y	Y	Y
Smart Defog	Y	Y	Y	Y
Corridor	NA	Y	Y	Y
VCA	Tripwire/Double Tripwire/Perimeter/ Early Warning/Heat Map/Audio Abnoraml detection/Videoabnormal detection/Auto Tracking.	Abandon/ObjectLost/Running/Loitering/ Parking/CrowdCounting/Facedetection/	Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd Counting/ Face detection/ people counting/ Audio a bnormal detection/ video a bnormal detection/ Early Warning	Tripwire/ Double Tripwire/ Perimeter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd Counting/ Face detection/ people counting/ Audio abnormal detection/ video abnormal detection/ Early Warning
Audio I/O	1/1 Built in Dual Mic & Speaker	1/1, Mic In	1/1, Built in MIC & Speaker	1/1, Built in MIC & Speaker
Alarm I/O	2/1CH	2/1CH	1/0CH	1/0CH
Memory Slot	Micro SD card slot up to 128GB	2Micro SD card slot up to 512GB	Micro SD card slot up to 128GB	Micro SD card slot up to 128GB
USB	NA	1Ch	1Ch	1Ch
System compatibility	Onvif ( Profile S),CGI	Onvif ( Profile S),CGI	Onvif ( Profile S),CGI	Onvif ( Profile S),CGI
IR Range	15M	NA	50M	50M
IR LED	3 pcs Lattice	NA	2 pcs Lattice	2 pcs Lattice
Power Supply	DC12V, POE	DC12V, AC 24V, POE	DC12V, POE	DC12V, POE

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# **Product Portfolio- 3 Series Fixed Camera**

### 2 Series Products will have Motorized Lens 2MP, 5MP AEW Camera

Model	NT-IBT32ME	NT-IDS32ME	NT-IBT35ME	NT-IDS35MN	
Specification	18/P/A/S/R/2.8-12MM	I3/P/A/S/R/2.8-12MM	18/P/A/S/R/2.8-12MM	I3/P/A/S/R/2.8-12MM	
Images	Q				
Image Sensor	1/2.8	" CMOS	1/2.8"	CMOS	
Resolution	2MP Super Starli	ght AEW Motorized	5MP Super Starli	sht AEW Motorized	
Min Illumination	Color : 0.0004Lux	🤉 @ (F 1.2, AGC ON)	Color : 0.002Lux	@ (F 1.6, AGC ON)	
	B/W : 0.0001Lux	@ (F 1.2 AGC ON)	B/W : 0.001Lux	@ (F 1.6 AGCON)	
Lens	Motorize	ed 2.8-12MM	Motorized	1 2.8-12MM	
Video Compression	S+265/H.265	JH.264/MJPEG	S+265/H.265,	/H.264/MJPEG	
Frame Rate	<u>1920*10</u>	<u>)80@30FPS</u>	<u>2560*19</u>	20@20FPS	
WDR	1	20dB	120dB		
HLC	Y			Y	
Smart Defog		Y		Y	
Corridor		Y		Y	
VCA	Loitering/Parking/Crowd Counting/	/ Object Abandon/ Object Lost/ Running/ Face detection/ people counting/ Audio phormal detection/ Early Warning			
Audio I/O	1/1, Built in	MIC & Speaker	1/1, Built in I	VIC & Speaker	
Alarm I/O	2	/1CH	2/	1CH	
Memory Slot	Micro SD card	slot up to 128GB	Micro SD card	slot up to 128GB	
USB		1Ch	1Ch		
System compatibility	Onvif ( P	rofile S),CGI	Onvif ( Profile S),CGI		
IR Range	80M	30M	80M	30M	
IR LED	4 pcs Lattice	14 pcs Array	4 pcs Lattice	14 pcs Array	
Power Supply	DC1	2V, POE	DC12	V, POE	
IP Protection	IP67	IP66	IP67	IP66	

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# **Product Portfolio- 3 Series PTZ Camera**



Model	NT-IPP32AT	NT-IPS35AT	NT-IPP32ATW			
Specification	140/P/44X/AT	140/P/44X/AT	I80/P/44X/S/AT/W/180			
Images						
Image Sensor	1/1.8" CMOS	1/2.8" CMOS	1/1.8" CMOS			
Resolution	2MP Super Starlight 44X	5MP Starlight 30X	2MP SuperStarlight 44X			
Min Illumination	Color : 0.0004Lux @ (F 1.5, AGC ON) B/W : 0 lux with IR	Color : 0.002Lux @ (F 1.5, AGC ON) B/W : 0 lux with IR	Color : 0.0008Lux @ (F 1.5, AGC ON) B/W : 0 lux with IR			
Optical Zoom	44X	30X	44X			
Digital Zoom	16X	16X	16X			
Video Compression		S+265/H.265/H.264/MJPEG				
Frame Rate		<u>1920*1080 @ 60FPS</u>				
WDR		140dB				
Cruise	16, up to 32 preset per cruise					
Preset	500					
Auto Tracking		Υ				
Early Warning		γ				
Video Enhancement		BLC/3D DNR/HLC				
VCA	Tripwire/Double Tripwire/Perimeter/Object Abandon/Object Lost/Running/Loitering/Parking/Crowd/Video Abnormal/Audio Abnormal/Heatma Face Detection/People Counting/On Duty Detection/Saftey Helmet Detection					
Audio I/O		1/1CH				
Alarm I/O		8/2CH				
Memory Slot	YES up to 128GB					
System compatibility	Onvif ( Profile S),CGI,SDK					
IR LED		10pcs, 180M				
White LED	2					
Power Supply		DC24V, POE+				
IP Protection		IP66				

# **Product Portfolio- 3 Series NVR**



Model	NT-IN31680	NT-IN324160	NT-IN324320	
Specification	3/12M/400Mb/RAID	3/12M/1280Mb/RAID	3/12M/1280Mb/RAID	
Image				
Video Input	80 CH	160 CH	320 CH	
Decoding Format	S+265/H.265/H.264	S+265,	/H.265/H.264	
Input/output Bandwidth	400Mbps/200Mbps	1280M	bps/640Mbps	
Recoridng Resolution	Up to 12MP	Ur	o to 12MP	
Sync Playback	16*1080P,32*720P,64*4CIF,4*8MP/5MP, 2*12MP	20*1080P,40*720P,8	0*4CIF,5*8MP/5MP,3*12MP	
HDD ( SATA )	16 HDD	24 HDD		
E-SATA	1	1		
RAID	Up to RAID 10	Up	to RAID 60	
Audio In	1CH		1CH	
Audio Out	1xRCA		1xRCA	
Alarm In/out	16/4 CH	16/4 CH	44/22 CH	
HDMI/VGA	2/2 CH		2/2 CH	
VCA	• • • • •	meter/ Object Abandon/ Object Lost/ Running/ Loitering/ Parking/ Crowd Coun ounting/ Audio abnormal detection/ video abnormal detection/ Early Warning		
Network Interface	2*RJ45 Network Interface	4*RJ45 N	etwork Interface	
Power Supply	AC 100-240V	AC	100-240V	
Chassis	3U		4U	

### **Product Portfolio- 4 Series**



	Resolution	2	2MP		
	Lens	Fixed	Motorized		
IPC	S+265 Starlight Face capture	CO C			
	S+265 Super Starlight Face Recognition	UP NEOS	NEW CONTRACTOR		

	Hard Drive	1HDD	2HDD	8HDD
NVR	S+265 Face Recognition	5CH	10CH	20CH/40CH/80CH

**Q & A** 







# Thank you