HINSTEK DIGITAL | VTRACK RV3900-2U

PROTECT YOUR MOST VALUABLE ASSETS

Instek Digital™ VTrack StolenObject video intelligent feature automatically detects and signalizes removed objects in real-time.

VTrack StolenObject ensures effective and efficient assets, goods and facilitity management. It easily detects theft and prevents manipulation and damage. Including preventing vandalism of monuments or sensitive assets.

Vertical market:

- industrial areas and critical infrastructures
- commercial centres, chain stores, supermar
- banks
- ports, airports, metro and railway stations
- museums, schools, prisons, hospitals, public

Key Features

- Full integration with Instek Digital™ VMS Command Center
- Windows based software architecture
- Unlimited configurable virtual zones of any shape and size
- Filtering out false alarms due to atmospheric phenomena, variations in environmental condition, vegetation
- Enabling/disabling of the module by external input or time scheduling
- Specific algorithmes for filtering shadows and light changes
- Watchdog functionality: for automatic restart of the module in case of critical errors or hardware unit restart
- Automatic and real-time alarm notifications



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Instek Digital is a video surveillance business unit of Good Will Instrument Co., Ltd. and focus on the development of high quality digital surveillance solutions. The company inherited over 20-years of surveillance experience. Instek Digital has the luxury of a strong financial background supported by Good Will Instrument Co., Ltd. — has over 40-years of electronics R&D and manufacturing experience. And Good Will Instrument Co., Ltd. is also listed on the Taiwan Stock Exchange.

Instek Digital offers a wide array of video surveillance software and hardware – under the brand of Instek Digital. The core design are based on the following principles; "User-Friendliness", "Scalability" and "Reliability". Instek Digital's solutions are based on an open platform – creating seamless third party integration. With this concept Instek Digital has created a business model that can meet every aspect in today's surveillance demand. The results speak for themselves – based on small and large projects that we have deployed around the world.

Functional Specifications

- Integrate within Instek Digital[™] VMS Command Center
- Modular, scalable and flexible software architecture, available for Windows/Linux o.s. 32/64bit
- Unlimited configurable virtual zones, of any shape and size
- Detection and tracking of unlimited subjects of interest in the scene
- Robust and reliable in filtering false alarms due to atmospheric phenomena, changing of environmental conditions, vegetation, thanks to the most advanced self-adaptive algorithms based on Self Learning Background Modelling, Foreground Filtering and Multitarget Tracking
- Specific algorithms for filtering shadows and lighting changes
- Filtering of objects by size, type and dynamics
- Morphological filtering for improving the efficiency of the detection and separation of subjects by shape enhancement
- Ability to select several active points of the detected subjects (ex. baricenter and/or ground point and/or left upper point ...)
- Filtering of subjects of interest with specific size for each configured alarm zone (ex. Zone1: alarm only on little objects detection, Zone2: allarm only on big objects detection, ...)
- 3D perspective management by linear interpolation on image, or by image calibration
- Unlimited configurable no-processing virtual zones, to inhibit not-of-interest areas in the image
- Unlimited configurable crops of the image, each one processed as separate video source
- Enabling/disabling of the module by external input or time scheduling
- Calendar function, for the scheduling of different configurations in different timeframes
- Ability to process at resolution and frame rate different from the source ones
- VirtualAlertRule function, for the generation of alarms by correlating in AND within a certain time the occurring of multiple configured alarms
- Visualization on a centralized graphic map of the position and trajectory of the detected subjects
- Interface for the simulation of the processing results, to verify the correctness of the configuration
- VTClient interface for the real time visualization of live and alarms, with bounding boxes and trajectories overlays
- Watchdog function, for the automatic restart of the module in case of critical error or hw unit restart
- Automatic and real time alarms sending to: VMS or NVR compatible platforms
 - I/O contacts, electrical devices, external DVR or NVR units, through Modbus I/O units
 - e-mail, with in attachment the image related to the generated alarm
 - FTP server
 - serial port, PLC
 - network device through http/TCP call, customizable
 - VTrack-Recorder function, for the storage in local directories of continuous or event-based videos

₩INSTEK DIGITAL | Specifications

System	Operating system	Microsoft® Windows™ 10
	CPU	Intel® Core™ i7
	Resolution	CIF
	Frame rate	10
	Streaming protocol	RTSP / ONVIF
	CMS / NVR behavior	trigger, recording, live/map, popup, PTZ, DO
	Keyboard mouse	PS/2 USB
	Ethernet	1 x Gigabit
	USB	4 x USB3.0 + 4 x USB2.0
	Display port	1 x VGA / 1 x DVI-D / 1 x HDMI
Environmental	Operating temperature	0 ~ 40°C
	Humidity	Max. 90%, non-condensing
Electrical	Power input	AC 100V ~ 240V
	PSU	300W
Mechanical	Form factor	2U
	Dimensions w / wo box (WxHxD mm)	570 x 535 x 245 / 445 x 402 x 88
	Weight w / wo box (kg)	12.2 / 8.6

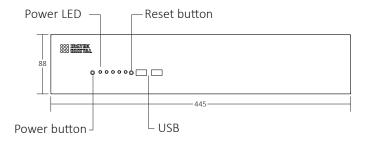
a) The actual video display performance may vary according to type of camera(s) and lighting condition. b) Product specifications and availability are subject to change without notice. c) Instek Digital is a registered trademark of Good Will Instrument Co., Ltd.

Models:	Description:	Models:	Description:
HR-RV3900-2U	Turnkey	HR-RV30C5-SW	License, 1 channel + 5 rule
HR-RV30S1-SW	Standard software	HR-RV30C6-SW	License, 1 channel + 6 rule
HR-RV30C1-SW	License, 1 channel + 1 rule	HR-RV30C7-SW	License, 1 channel + 7 rule
HR-RV30C2-SW	License, 1 channel + 2 rule	HR-RV30C8-SW	License, 1 channel + 8 rule
HR-RV30C3-SW	License, 1 channel + 3 rule	HR-RV30C9-SW	License, 1 channel + 9 rule
HR-RV30C4-SW	License, 1 channel + 4 rule	HR-RV30CA-SW	License, 1 channel + unlimited rules

Technical requirements for VTrack Software solution:

Video flow acquisition from:	- entirely visible in the image for at least 10-15 continuous	
- IP cameras (optical or thermal), through standard protocols	frames- minimum size: area of 100 pixels	
rtp/rtsp, mjpeg or ONVIF	- maximum size: about 1/4 of the image	
- analogue cameras (optical or thermal), by IP video encoders	Minimum frame rate: 8fps	
through standard protocols rtp/rtsp, mjpeg or ONVIF, or by	• Suggested image resolution: CIF (352x288) or QVGA (320x240)	
compatible frame grabber cards	Computational need:	
- NVR compatible or through standard protocols rtp/rtsp, mjpeg	- CPU: up to 5 video flows in CIF/QVGA resolution at 8fps with	
or ONVIF	single core 2.8GHz	
- off-line videos in all standard formats (avi, asf, mpg, mov,)	- RAM: about 100MB for each processed video flow	
• Conditions of the subjects of interest in the image in order to be	- Intel® HD Graphics / NVIDIA® GT730 or higher graphics card	
effectively detected:	- Windows (XP or next) or Linux, 64 bit operating system	
- clearly visible to the naked eye in the image, even in difficult		
environmental conditions (night, heavy rain, fog, glare from the		
sun or other sources of artificial light, snow,)		

Front View RV3900-2U



Rear View RV3900-2U

