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TC-S36424 Spec: T/4U/V5.2

K2000 All-in-one Machine

KEY FEATURES

System
- Linux
- English WEB management interface

Management Channels
- Max 2000 video channels

Hard Disk
- Support access to 23 hard disks
- One 4T enterprise-level hard disk is standard equipped

HDMI
- 2 HDMI decoding output

Built-in Software
- Easy7 CMS V9.3.0

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SPECIFICATIONS

Controller	
Product	K2000
Product Overview	The K2000 is an all-in-one machine with built-in integrated management platform, streaming media middleware, and Tiandy streaming storage software. It can manage up to 2000 channels
System Disk	64G SSD
Memory	24G
Processor	64-bit multi-core processor
Data Disk	Support 2.5 "or 3.5" SATA; A standard 4T enterprise-class hard disk is used as a data disk (occupying one disk slot) and cannot store videos, in SATA 1 port. Each of the other 23 disk slots supports a maximum of 18 TB hard disks.
Operating System	openEuler-22.03-LTS-SP1
Disk Number	4U/24
Array Type	Support Raid 0/1/5/6/10/50/60
Memory Channel Number	•Simultaneous image storage and video storage: Video storage performance supports up to 180 channels (2Mb, H265) •Use only video storage; Maximum video storage performance 200 channels (2Mb, H265)
Software	
Pre-installed Software	Easy7_CMS_V9.3.0
Sub System	Video preview, Video playback, Video on the wall, Video preview (WEB version), Video playback (WEB version), Access Control, Vehicle Management, Face Application, Passenger Flow Management, Attendance Management, etc.
System Bandwidth	Access bandwidth: 360Mbps Forwarding bandwith: 360Mbps
NTP Setting	Support NTP time synchronization
External Interface	
Network Interface	4
String Interface	2 (RS-485); 1 (RS-232)
USB Interface	2 USB2.0; 2 USB 3.0
HDMI Interface	2
Alarm Input/Output	8/4
General Norm	
Power Supply	AC100V～240V; 50Hz
Quantity of Power Supply	1 (550W)
Power Consumption	Power rating: 550W
Operating Temperature	5°C~40°C
Operating Humidity	10%~90% (No Condensation)
Dimension	534mm (L) × 446mm (W) × 173mm (H)

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PERFORMANCE

Classification	Data Classification	Calculation Rule	K2000
Data Capacity Index	Network bandwidth	Uplink bandwidth	1000
	Number of points	1 point/server	2000
	Number of encoding devices		2000
	Number of middleware servers		600
	Number of decoders		50
	Access point of the master control middleware		2000
	User number	The platform comes with 3 system users + supports adding more users	5003
	Organization Area		1000
	Number of staff		5000
	Customer flow camera		400
	Car brake		10
	Self-developed PAD	MQTT is installed with the master control service, but cannot be mixed with other pads	100
	Door		120
	Face vehicle camera		75
	Duration	300	300
	Years	1 year	0.25
	Uplink bandwidth		360
	Downlink bandwidth		360
	Storage duration	Storage duration	91
	Resident User	0.1 * total number of users	500
	Number of PAD+ card readers	1/door	120
	Number of vehicles	0.2/total number of people	1000
	Face mount	0.5/total number of faces and vehicles	37.5
	Vehicle bayonet	0.5/total number of faces and vehicles	37.5
	Daily personnel entry and exit records	2 times/person/day	10000
	Daily vehicle entry and exit records	1 time/car/day	1000
	Face PAD Recording	4 times/day/total number of people	20000
	Access controller events	Access control records	7
	Face camera recording	130 times/day/face card slot	4875
	Vehicle passing record	59 times/day/vehicle checkpoint	2213
	Customer flow camera recording	45/passenger flow cameras	18000
	alarm record	1/total number of devices	2000

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Data Capacity Index	Operation log	120 items/day/permanent user	0
	Vehicle control alarm	Article/day	20
	Map points	--indivual	1000
	Native decoding performance (output resolution)		4
	Video storage performance	2Mbps/point	180
	Video forwarding performance	2Mbps/point	180
	Target library		100
	Face recognition alarm		75
Plug-In	i5-8500 16G Soft Decoding	1080p/4096/H265	5
		720p/4096/H.265	8
		4CIF/1024/25/H.265	22
		8MP(3840*2160)/8192/H265	1
		1080p/4096/H.264	6
		720p/4096/H.264	12
		4CIF/1024/25/H.264	27
	Does not support hard decoding	-	-
	Intel i7-12700 16G NVIDA GeForce RTX 3050 OEM Soft Decoder	1080p/4096/H265	15
		4CIF/1024/H.265	49
		CIF/1024/H.265	104
		2K/4096/H.265	9
		1080p/4096/H.264	34
		4CIF/1024/H.264	128
		CIF/1024/H.264	256
		2K/4096/H.264	22
No Plug-In	Client configuration i5-9500 16G video preview (using CPU for decoding) Google versions below 9.0 support this performance	Main stream/fixed bitrate/1080p/2048/25/H.265	4
		Main stream/fixed bitrate/720p/2048/25/H.265	8
		Main stream/fixed bitrate/1080p/2048/25/H.264	10
		Main stream/fixed bitrate/720p/2048/25/H.264	16
		Main stream/variable bit rate/1080p/2048/25/H.265	5
		Main stream/variable bit rate/720p/2048/25/H.265	10
		Main stream/variable bit rate/1080p/2048/25/H.264	12
		Main stream/variable bit rate/720p/2048/25/H.264	16
		Sub-stream/fixed bit rate/4CIF/2048/25/H.265	16

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No Plug-In	Client configuration i5-9500 16G video playback (using CPU for decoding)	Main stream/fixed bitrate/1080p/2048/25/H.265	4
		Main stream/fixed bitrate/720p/2048/25/H.265	8
		Main stream/fixed bitrate/1080p/2048/25/H.264	10
		Main stream/fixed bitrate/720p/2048/25/H.264	16
		Main stream/variable bit rate/1080p/2048/25/H.265	5
		Main stream/variable bit rate/720p/2048/25/H.265	10
		Main stream/variable bit rate/1080p/2048/25/H.264	12
		Main stream/variable bit rate/720p/2048/25/H.264	16
		Sub-stream/fixed bit rate/4CIF/2048/25/H.265	16
	Client configuration i5-9500 16GVideo Preview(Use CPU for decoding) Edge browser (version 107)	Main stream/fixed bitrate/1080p/2048/25/H.265	1
		Main stream/fixed bitrate/720p/2048/25/H.265	2
		Main stream/fixed bitrate/1080p/2048/25/H.264	4
		Main stream/fixed bitrate/720p/2048/25/H.264	7
		Main stream/variable bit rate/1080p/2048/25/H.265	1
		Main stream/variable bit rate/720p/2048/25/H.265	3
		Main stream/variable bit rate/1080p/2048/25/H.264	10
		Main stream/variable bit rate/720p/2048/25/H.264	16
		Sub-stream/fixed bit rate/8MP/2048/25/H.265	5
	Client configuration i5-9500 16G video playback (using CPU for decoding) Edge browser (version 107)	Main stream/fixed bitrate/1080p/2048/25/H.265	1
		Main stream/fixed bitrate/720p/2048/25/H.265	2
		Main stream/fixed bitrate/1080p/2048/25/H.264	4
		Main stream/fixed bitrate/720p/2048/25/H.264	7

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No Plug-In	Client configuration i5-9500 16G video playback (using CPU for decoding) Edge browser (version 107)	Main stream/variable bit rate/1080p/2048/25/H.265	1
		Main stream/variable bit rate/720p/2048/25/H.265	3
		Main stream/variable bit rate/1080p/2048/25/H.264	10
		Main stream/variable bit rate/720p/2048/25/H.264	16
		Sub-stream/fixed bit rate/4CIF/2048/25/H.265	5
Pressure performance index (standard value)	Simultaneous online users operate once every 30-60 seconds	Concurrent Online Users	50
	The continuous platform comes with 3 system users + supports adding S number of users to alarm concurrently (face/passing car (control alarm), event alarm and other data)	10 pieces/s	10
	The continuous platform comes with 3 system users + supports adding users S/60 intervals*face pad	Face pad/duration	1.7
	The continuous platform comes with 3 system users + supports adding users S/90 intervals* face vehicle checkpoints	Face and vehicle checkpoints/duration	0.8
	Continuous platform comes with 3 system users + supports adding users S/100 intervals* passenger flow camera	Passenger flow camera/duration	4
	The continuous platform comes with 3 system users + supports adding users in S/90 intervals* access control card reader and pad	Access card reader and pad//Duration	1.33

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Pressure performance index (standard value)	The continuous platform comes with 3 system users + supports adding users S/180 intervals*gate	Brake/Duration	0.06
	Concurrent login users 6S login lasts 30 seconds each time	200 users	No permanent
	An average of 45 seconds per operation	Concurrent Online Users	40
	Number of alerts per second	15 pieces/s	15
	Face pad image upload times per second	Face pad/duration	10.0
	Number of reports per second from vehicle checkpoints with facial features	Face and vehicle checkpoints/duration	12.5
	Number of reports per second from passenger flow cameras	Passenger flow camera/duration	8
	Access control report number per second	Access card reader and pad//Duration	5
	Number of brake reports per second	Brake/Duration	1
	Number of concurrent users logging in per second	200 users	4
File storage metrics	Lightweight file storage	15M/S, 25 pictures/second	15M/S, 25 pictures/second
	Decoding performance	Local decoding supports 4-channel 1080P	4
Historical data capacity indicators	Total number of log records		1600000
	Total number of alarm records		4000000
	Total number of entry and exit records		800000
	Total number of vehicle passing records		160000
	Non-motor vehicle passing record		160000
	Alarm control		4000
	Attendance data		1600000
	Total number of passenger flow camera records		80000
	Face alarm		200000
	Face capture		400000
	Total amount of data		10000000

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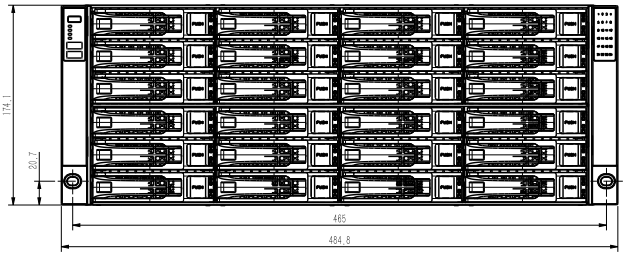
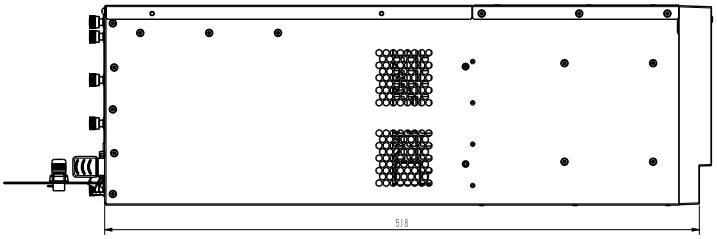
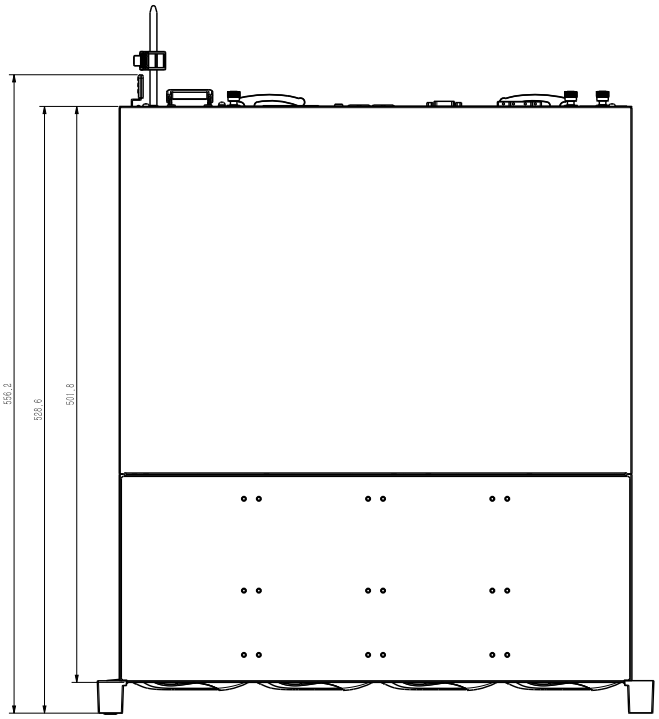
DIMENSIONS (Unit: mm)







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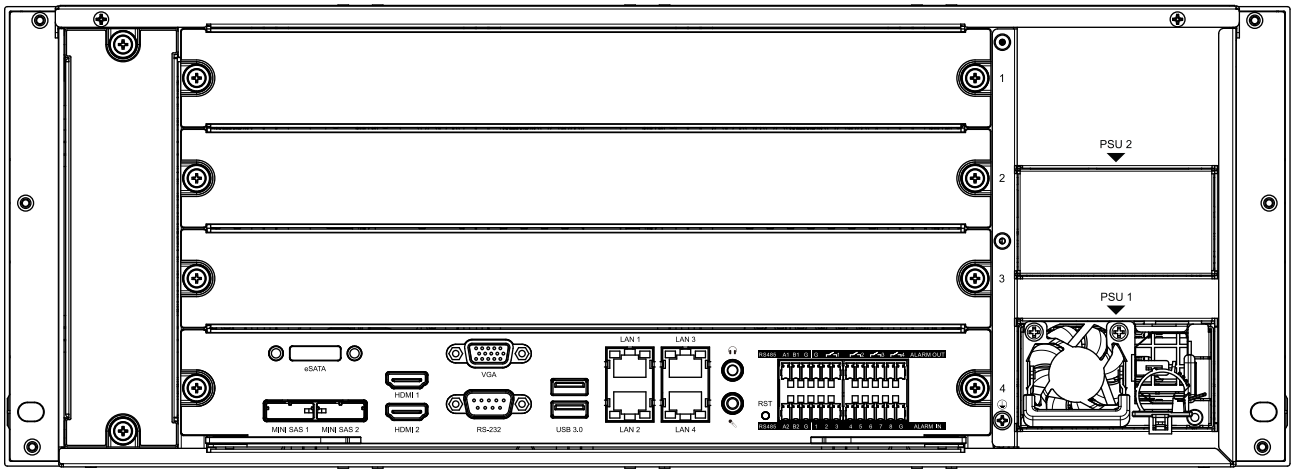
Physical Interfaces



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Tiandy Technologies Co.,Ltd.
Email: sales@tiandy.com Tel: +86-22-58596065
Website: en.tiandy.com Fax: +86-22-58596048