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 24 hard disks
- One 4T enterprise-level hard disk is standard equipped

### HDMI

• 2 HDMI decoding output

#### **Built-in Software**

• Easy7 CMS V9.2.0



### **SPECIFICATIONS**

Controller			
Product	K2000		
	The K2000 is an all-in-one machine with built-in integrated management platform,		
Product Overview	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		
	Support 2.5 "or 3.5" SATA; A standard 4T enterprise-class hard disk is used as a data		
Data Disk	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		
	•Simultaneous image storage and video storage: Video storage performance		
Memory Channel Number	supports up to 180 channels (2Mb, H265)		
Memory Chainlet Number	•Use only video storage; Maximum video storage performance 200 channels (2Mb,		
	H265)		
Software			
Pre-installed Software	Easy7_CMS_V9.2.0		
	Video preview, Video playback, Video on the wall, Video preview (WEB version),		
Sub System	Video playback (WEB version), Access Control, Vehicle Management,		
	Face Application, Passenger Flow Management, Attendance Management, etc.		
	Access bandwidth:		
System Bandwidth	Face model 360M; Surveillance model 512M		
System Bundwidth	Forwarding bandwith:		
	Face model 400M; Surveillance model 512M		
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		
	E00 1000		
Operating Temperature	5°C~40°C		
	5°C~40°C 10%~90% (No Condensation) 534mm (L) × 446mm (W) × 173mm (H)		



### **PERFORMANCE**

Classification	Data Classification	Calculation Rule	K2000
	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		2000
	middleware		
	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
Data Capacity Index	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

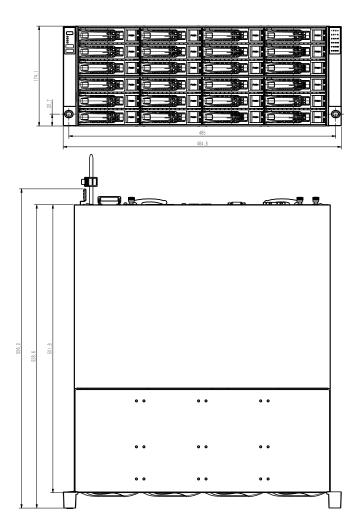
	Operation log	120 items/day/permanent user	0
	Vehicle control alarm	Article/day	20
	Map points	indivual	1000
Data Capacity Index	Native decoding performance (output resolution)		4
. ,	Video storage performance	2M/point	180
	Video forwarding performance	2M/point	180
	Target library		100
	Face recognition alarm		75
		1080p/4096/H265	5
		720p/4096/H.265	8
		4CIF/1024/25/H.265	22
	i5-8500 16G Soft Decoding	8MP(3840*2160)/8192/H265	1
	l little state of	1080p/4096/H.264	6
		720p/4096/H.264	12
		4CIF/1024/25/H.264	27
Plug-In	Does not support hard decoding	-	-
ı tug-ili	Does not support hard decoding	1080p/4096/H265	15
		4CIF/1024/H.265	49
	Letel 7 12700 166 NVIDA CeFerre DTV	CIF/1024/H.265	104
	Intel i7-12700 16G NVIDA GeForce RTX 3050 OEM Soft Decoder	2K/4096/H.265	9 34
		1080p/4096/H.264	
		4CIF/1024/H.264	128
		CIF/1024/H.264	256
		2K/4096/H.264	22
	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
No Plug-In		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

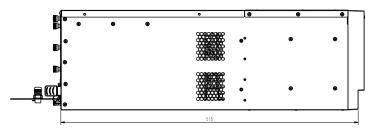
		Main stream/fixed bitrate/1080p/2048/25/H.265	4
		Main stream/fixed bitrate/720p/2048/25/H.265	8
		Main stream/fixed bitrate/1080p/2048/25/H.264	10
	Client configuration i5-9500 16G video	Main stream/fixed bitrate/720p/2048/25/H.264	16
	playback (using CPU for decoding)	Main stream/variable bit rate/1080p/2048/25/H.265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

		T	
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

	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
Pressure performance	Face pad image upload times per second	Face pad/duration	10.0
index (standard value)	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/secon d
	Decoding performance	Local decoding supports 4-channel 1080P	4
	Total number of log records		1600000
	Total number of alarm records		4000000
Historical data capacity indicators	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

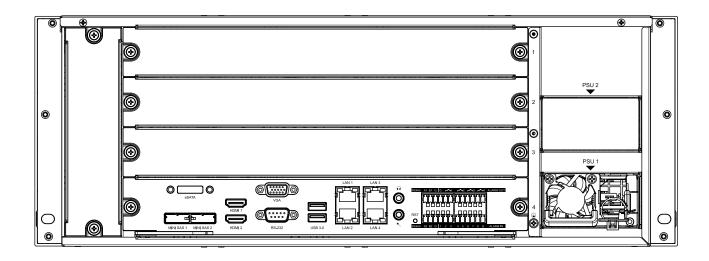
### **DIMENSIONS (Unit: mm)**







### **Physical Interfaces**



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