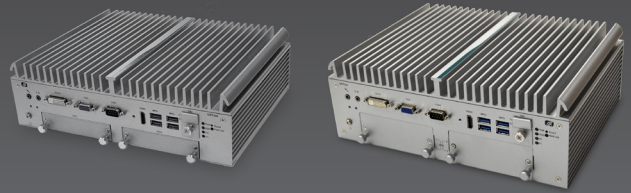


T2000 On-Vehicle NVR

SY-T2000-U52 / SY-T2000-U54

With native connection to Synectics Cloud Services, the T2000 enables real-time tracking and monitoring of vehicles, over-the-air video uploads, and effortless export of video incidents for easy collaboration and sharing.



Featuring a built-in GSM modem for 4G connectivity and seamless access to Synectics Cloud Services, the combination of the T2000 and our cloud-based software enables security and fleet management in one, unified platform.

Integration to Synectics Cloud Services enables:

- Access to live CCTV, telematics, and vehicle health data
- Historical route analysis, incident creation, and footage export
- End-to-end evidence management and collaboration with emergency services, insurers, and other third parties
- Easy management of footage requests
- Fleet-wide asset management

As a standalone NVR, the T2000 features core functionality that transport operators depend upon including GPS and CAN bus support, built-in tri-axis accelerometer, independent monitor outputs, and a secure proprietary file system.

The T2000 can be tailored to specifications and operational requirements. In addition to the removable hard drives, optional storage expansion through Network Attached Storage (NAS) offers increased retention or higher frame rates and resolutions.

A highly reliable device in a wide range of environmental conditions, the unit is designed to comply with EU standards and transport-specific standards for various vehicle types relating to EMC, shock, vibration, and temperature.

Features

- 16 built-in POE+ RJ-45 ports
- Up to 32 digital IP video streams
- Up to 4x 2.5" removable hard disks
- Built-in GPS, optional dual SIM GSM modem, tri-axis accelerometer, and CAN bus module
- 3x independent monitor outputs
- E-Mark, CE, and FCC certification
- Compliant with EN50155 and ISO 7637-2

Specifications

GENERAL	
Dimensions (WxHxD) mm	SY-T2000-U52: 280 x 83.7 x 210.4 SY-T2000-U54: 280 x 99.2 x 210.4 (excluding connections / mounting brackets)
Mounting	Wall mount brackets included
Chassis Construction	Extruded aluminium and heavy-duty steel (IP30)
CPU (Processor)	Intel® Celeron G3900TE (35W TDP)
RAM (Memory)	4GB SO-DIMM DDR4
PSU Input	9V – 36V DC
Consumption	24V @ 10A
Operating System	Linux with proprietary VM-based application
CAMERA	
Video Inputs	Up to 16 full-HD digital IP cameras (PAL / NTSC) 16x POE (802.3af 15.4W/port) / POE+ (802.3at 30W/port) Max 200W
Streams per Input	Total: 2 (1 HD for recording and 1 SD for display output)
Maximum Resolution / Frame Rate	3840 x 2160: up to 25/30 fps
RECORDING	
Hard Drive	SY-T2000-U52: 2x removable caddies supporting 2x 2.5" SATA III 6Gb/s SY-T2000-U54: 2x removable caddies supporting 4x 2.5" SATA III 6Gb/s Hard Drive(s) not included
Maximum Hard Drive Height	15mm
Hard Drive Size	Choice of disk sizes available up to 4TB
Resolution IP Camera	Determined by camera stream resolution
Frame Rate	Up to 25/30 fps per channel
File System	Synectics File System for lower-energy use and maximum recording efficiency, integrity, and security
Recording Disk Write Cycle	1 second
VIDEO COMPRESSION	
Compression	Selectable H.264 AVC high profile / main profile (MPEG4 part 10)
Data Rate	Maximum 6Mb/s per IP camera Maximum total throughput for all connected IP cameras ~64Mb/s
MONITOR OUTPUTS	
Digital	1 x VGA (1920 x 1200 @ 60Hz) 1 x DVI-D (3840 x 2160 @ 60Hz) 1 x HDMI (3840 x 2160 @ 60Hz)
Display Format	All monitor outputs configurable as full-screen, 1x2, and 2x2
AUDIO	
Inputs	4 mono channels via IP camera microphone
Input Level	1V RMS
Compression	G.711
Sampling Rate	8K / 16K

NETWORK

Interface	SY-T2000-U52: 8x POE RJ-45 GbE by Intel® i211-AT SY-T2000-U54: 16x POE RJ-45 GbE by Intel® i211-AT
Protocols Supported	RTP/RTSP /TCP/IP / UDP / IGMP / SNMP / HTTP / NTP
Password Levels	Administrator / Super User / User
Supported Internet Browsers	Internet Explorer 11 / Edge / Chrome / Firefox

OPERATION

CAN 2.0	Communications interface (optional)	DB9 terminal blocks
USB 3.0	Communications interface (peripherals)	4 ports
GPS	NMEA serial from vehicle	Via RS-232 COM port
GSM	Cellular network interface 3G/4G LTE (optional)	Dual SIM Antenna via SMA
Serial Data	Serial COM port	RS-232/422/485
Digital I/O	Configurable via webpage	6x in/2x out (isolation voltage 5 kV)
Events	Built-in tri-axis accelerometer (optional) Comprehensive health and event recording Comprehensive data recording (geofencing and real-time tracking via Synectics Cloud Services) Event-driven incident retrieval (via Synectics Cloud Services) Configurable ignition-based shutdown timer	

ENVIRONMENTAL

Environment	IP30 protection
Cooling	Fanless passive cooling to prevent dirt/dust ingress
Operating Temperature	-40°C ~ +70°C
Storage Temperature	-40°C ~ +80°C
Humidity	0% ~ 95% non-condensing
Operating Shock	EN (IEC) 61373 category 1 class B, half-sine pulse, 5g, 30ms longitudinal direction), 3g, 30ms (vertical/transverse direction) compliant
Operating Vibration	3 Grms w/ SSD (5 to 500Hz, X/Y/Z direction, random, operating) MIL-STD-810G, method 514.6C-VL category 4 compliant
Weight (Net/Gross)	SY-T2000-U52: 4.92 kg / 5.75 kg SY-T2000-U54: 4.92 kg / 5.74 kg
Certifications	EMC, CE, FCC, and E-Mark Compliant with EN50155 and ISO 7637-2

PART CODES

8 Channel NVR	SY-T2000-U52 (no options) SY-T2000-U52-CANG (with CAN + G sensor module) SY-T2000-U52-GSM (with GSM module) SY-T2000-U52-CANG-GSM (with CAN + G sensor & GSM module)
16 Channel NVR	SY-T2000-U54 (no options) SY-T2000-U54-CANG (with CAN + G sensor module) SY-T2000-U54-GSM (with GSM module) SY-T2000-U54-CANG-GSM (with CAN + G sensor & GSM module)
Standard Modules	CAN + G sensor PCIe module: SY-T2000-U5-OPT-CANG GSM PCIe module: SY-T2000-U5-OPT-GSM

SY-T2000-U52 Rear View



SY-T2000-U54 Rear View

