

Automatinė numerių atpažinimo sistema ProVida ANPR – tai išskirtinis įrankis, padédantis patruliuoti policijos pareigūnui kelyje, aprūpinantis jį papildoma pora akių automobilyje. Ši sistema tyliai stebi automobilių eismą tuo metu, kai pareigūnas užsiima savo kasdieniniu darbu, sutrukdydama pareigūnui tik tada, kai įtariamas automobilis pasirodo akiratyje.



ProVida ANPR main module Specifications



ProVida ANPR system main module The Windows 2000/XP system offers the range of interfaces to enable the use of many types of peripherals such as fingerprint readers, rugged printers, rugged keyboards, camera input and vehicle tracking systems. Externally the PC range is the same, internally the processors are different. The PC comes with either the 1.8GHz Pentium M Dothan or the 1.3GHz Pentium M Celeron along with a choice of memory from 128MB to 2GB thus offering users higher performance whilst maintaining low power usage.

The system will support GPS for navigation, GPRS, Mini PCI, optional flash disk, Ethernet, video inputs, and disk heater. The full list of features and build options are shown below:

Specifications and connectors

CPU	Intel® Pentium® M processor 1.8GHz or a Celeron® processor running at 1.3GHz (other options available).
Memory	Up to 2GB of memory in two DDR memory sockets.
Display Adapter	Integrated 855GME "Intel Extreme Graphics 2" video controller for flat panel and analogue monitor (CRT) controller.
Video Capture (camera input)	Up to 4 independent Composite or S-video capture chips (PAL, SECAM and NTSC); each may be multiplexed to up to 3 additional inputs.
TV Output	RCA/Phono Output for Composite video in PAL or NTSC format.
USB	One optional, single USB 2.0 port (universal serial bus) to connect peripheral devices.
Expansion	Mini PCI socket (optionally used to connect the Wireless Lan card)
Wireless LAN (WiFi)	Intel PRO/Wireless 2200BG 802.11b/g
Ethernet	10/100Mbps with RJ45 twisted pair connector.
Hard Drive	IDE: 20G, 30G and 40G
Flash Disk Option	32MB to 20GB non-volatile IDE flash disk built in to the main unit.
Disk Heater	The heater switches on when the disk temperature falls below 7°C, and switches off when it rises to 8°C. If the external voltage (usually from the vehicle battery) is below the system-defined Battery Low level (which is between 9.6 and 10.6V), the heater cannot be turned on. Users cannot enable or disable the disk heater if fitted.
Sound	AC/97 Sound Blaster®-compatible sound system with a 1W speaker amplifier and audio jacks for: stereo line input and output, stereo speaker output, and mono microphone input. Sound output levels: Line output is 1V maximum root mean square into 10K Ohm minimum. Speaker output is 340mW maximum per channel into 8 Ohms.
Digital I/O (DIDO)	8 input and 8 output channels, optically isolated to protect the main unit. Optical isolators: Hewlett Packard HCPL-0701 devices or equivalent. The outputs are open collector transistors in two banks of four channels, numbered 0-3 and 4-7. Each bank has its own set of power and ground pins to power the optically isolated output stages. The maximum voltage on the power pin is 18V referenced to ground. The input signals are a differential pair with a 1K Ohm series resistor. The LED needs more than 0.5mA passing through it to turn it on.

Analogue I/O	Four analogue input channels.
Parallel Port	One standard 8-bit parallel port. Enhanced Parallel Port (EPP) or Enhanced Capability Port (ECP).
Serial Ports	<p>There are up to 8 serial ports.</p> <p>Two external RS232 serial ports with modem control lines.</p> <p>Two optional external RS232 serial ports with transmit and receive data only. Four internal serial ports, one for touch screen, one for optional GPS and two for optional GPRS/GSM modem modules.</p> <p>ESD protection: Human body model: +/-15KV IEC 1000-4-2 contact discharge: +/-8KV IEC 1000-4-2 air-gap discharge: +/-15KV A human body model specifies 5.33A at 8KV and 10A at 15KV. IEC 1000-4-2 specifies 30A at 8KV and 56.25A at 15KV.</p>
Keyboard & Mouse	<p>PS/2 input provided by rugged combined D9 connector. Optional 5m cable and mouse/keyboard splitter available.</p> <p>ESD protection: Keyboard and mouse ports have 300W 5V transient suppressors.</p>
GPS Module	12 Channel GPS receiver module mounted in the main unit and connecting to an external active (3.3V) GPS aerial. This option uses one of the serial ports (COM4). Antenna gain 12-18dB, max 23dB. The module is based on the SirfstarII low power chipset. The factory default configuration for this module is NMEA-0183 running at 4800 baud.
GPRS/GSM Module	Optional integrated single or dual GPRS modules with remote antenna. Motorola G18: Multi-slot class 1,2 and 4 (1 uplink and between 1 and 3 downlinks), Serial port – up to 57k baud.
Backup Battery	A backup service battery option stops the computer losing power immediately if the vehicle battery fails. The computer monitors the primary power source (usually the vehicle battery). If primary power is lost or interrupted, the computer switches to the backup service battery. The computer can then run on the backup until primary power is restored or the backup is exhausted. When it switches over, the computer can:- display a message, or sound a warning and shut Windows down in an orderly way. The computer controls charging of the backup battery.
Cage option	A perforated metal cage protects the system unit from damage from other objects in the boot/vehicle. The cage also ensures that the shock mounts can work unhindered.
Operating Systems	Microsoft Windows 2000 or Microsoft Windows XP. Also available with no operating system installed.
Relay Box Option	Provides connection to the vehicle's controls. For example, the relay box can be used to control a lightbar, or power to other equipment e.g. radios.
Screen Options	A choice of five standard screens, a 6.4 inch, two 8.4 inch, a 10.4 inch and a 12.1 inch or custom made.
Voltage	Input voltage: 7.5 to 18VDC. 24V input option available
Voltage Watchdog	The voltage watchdog monitors the +5V supply for power failure . If the supply goes more than 5% below specification, the processor is reset.
Power Consumption	<p>2.75A maximum @ 13.6V</p> <p>Screen off (under software control): 1.8A</p> <p>Shutdown: 0.045A</p> <p>Standby: 1.15A</p> <p>Typical: 1.85A</p> <p>These figures were obtained with an input voltage of 13.6V to PC with an 8.4 inch (21cm) screen, 1.8 GHz processor and running under Windows 2000.</p>
Temperature	<p>Operating: -10 °C to +55 °C</p> <p>Storage: -20 °C to +70 °C</p> <p>Humidity: 0 to 95% RH non-condensing</p>
Fuse	6Amps 20mm slow blow fuse in panel-mount holder on connector plate.
Self Healing Fuses	Protection by self-healing fuses includes: Keyboard: 500mA Mouse: 500mA USB: 500mA Video: 1A on DDC power out
Lithium CMOS Battery	The clock/calendar battery module uses a lithium cell. The manufacturer estimates the life of the part, with no power applied, at about ten years.

Case Size	192mm wide x 250mm deep x 105mm high
Typical Weight	1.9Kg
Approvals	<p>e-mark This product is designed to meet the limits of EC type approval of an electric/electronic sub-assembly with respect to electromagnetic compatibility (72/245/CCC), as last amended by Automotive directive 95/54/EC, with type approval by a VCA approved third party.</p> <p>E-mark E11 Approval No: 10R-020361</p> <p>A&ES5 (formerly VIDG5) approved to AES5 (formerly VIDG5) issue 9 (class I).</p> <p>CE mark This product is CE-marked for conformance to EN55022 (Electro-Magnetic Interference), EN55024 (Electro-Magnetic Immunity) and EN60950 (Safety for IT Equipment).</p> <p>PNC Service This product is approved for use with the Interim Mobile Data Network (IMDN) and Police National Computer (PNC) Service.</p> <p>Additional approvals 95/54/EC immunity ISO TR 10605 (ESD)ISO 7637 (transients)</p>
CPU Thermometer	The thermometer monitors processor temperature in increments of 0.1 ° C and warns if it exceeds a limit set in software
EMI/RFI Shielding	Peripheral connecting cables supplied by the integrator or installer must be shielded cables. Manufacturer recommends fitting of a ferrite absorber at the end nearest the system. Suitable types are the Richco MSFC range available from RS components and the Kitagawa SFC range available from Barfield.
Noise (acoustic)	The fan on the heatsink which has a noise level of 27dBA.
Shock & Vibration	For all three axes: Random vibration - 2-200Hz bandwidth, 1.04grms Shock - 20g 11ms half sine, 45g 3ms half sine.

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