# LVC-5000-A5

#### Fanless Mobile Hybrid NVR with Intel Celeron 1047UE or Core i7-3517UE featuring 8CH Analogue Video Plus 4 PoEs for Transport Surveilance Solution



#### **Features**

#### Multiple PoE LAN ports to support Transport Surveillance

This mobile NVR with 4 PoE ports (IEEE 802.3af) is suitable for IP Video Surveillance and real-time recording applications.

# Designed for MIL-STD-810G with Extreme Vibration Resistance

LVC-5000-A Series is in compliance with MIL-STD-810G vibration and shock standards and includes SSD storage and a Suspension Kit to further improve robustness.

#### Fanless Design with Corrugated Aluminum

The corrugated aluminum casing lets heat dissipate through the top of the device, allowing for a fanless design.

#### **Convenient DC output**

The LVC-5000-A Series offers 12VDC output (max 1A) for external devices, operational in concert with the Ignition Power Management feature.

#### Vehicle Ignition Power Management

Detects vehicle ignition on/off status and allows flexible control of the delay time via software utility.



#### **Analogue Video Grabber**

The analogue solution is a high-quality, high-performance video capture device with on-board hardware H.264 compression engine can record live video from cameras into high-quality H.264 Baseline Profile files, which is specially designed for surveillance applications and supports up to 8/16 channels of video inputs and 1 channel of audio input.

#### **Key lock for Drive Bay**

The system is with key lock for removable drive bay.

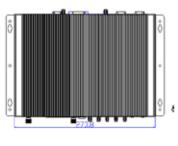
# Settings and Installation via the front panel

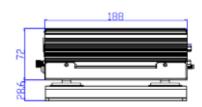
MCU setting and CF card and SIM card installation is easy to access simply by opening the front panel.

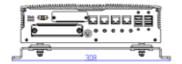
#### **Digital I/O**

The Digital I/O design includes 12V Level DI/O, audio, MCU TX/RX and also includes 2x DI (Digital Input from MCU) which can connect sensors to detect the environment. Once defined events occur, the LVC-5000 series can be turned on automatically.

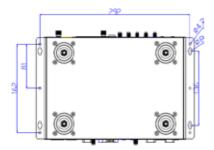
#### Dimensions: 273.8 x 72 x 188 mm (10.78" x 2.84" x 7.4")

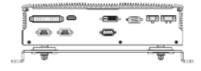












# **Preliminary Specifications**

|                     | >             |   |
|---------------------|---------------|---|
| Dimensions (Wxl     | lxD)          | 273.8 x 72 x 188 mm (10.78" x 2.84" x 7.4" )  |
| Processor           |               | LVC-5000-A1: Intel® Celeron® 1047UE Processor<br>LVC-5000-A5: Intel® Core™ i7-3517UE Processor  |
| Chipset             |               | Intel HM65  |
| System              | Technology    | DDR3 SO-DIMM x1 ( Factory default: 4GB module pre-installed )   |
| Memory              | Max. Capacity | Up to 8GB   |
| Storage             | SATA/CF       | Removable 2.5" SSD/HDD drive bay x1, CF socket x1   |
| Ethernet Controller |               | Intel 82583V x4   |
| Graphic Controller  |               | Intel integrated HD graphic engine  |
| Audio Controller    |               | Realtek ALC886 HD codec   |
| 10                  | LAN           | GbE RJ45 x 4  |
|                     | Display       | DVI-D, maximum resolution up to 1920x1200@75Hz<br>VGA, maximum resolution up to 2048x1536@60Hz<br>HDMI, maximum resolution up to 1920x1200@75Hz |
|                     |               | Dual display supports Independent, clone and extended mode.   |
|                     | Audio         | Mic-in and Line-out with 2 watt by terminal block MIO connector   |
|                     | Serial I/O    | 1x RS-232/422/485 both with RI/5V/12V   |
|                     | GPS           | Ublox NEO-7N GPS receiver module  |
|                     | G-sensor      | ADXL 345  |
|                     | Digital I/O   | 4x DI and 4x DO with 5V/12V Level by jumper setting 2x DI (from MCU) 3.3V Level 2x DO control relay with contact current @ 2A                   |
|                     | USB 2.0       | Type A x4   |
|                     | Power Input   | 3-pin terminal block (+, -, ignition)   |
|                     | Power Output  | 12 V / 1A DC  |
|                     | Expansion     | Mini-PCIe x2 (Both with SIM card slot)  |
|                     | Video Grabber | Techwell TW5866 H.264 Hardware En/Decoder with SDK supports for 8x<br>Analogue Video Input & 8x Audio Input                                     |
|                     | PoE           | LVC-5000A1: No PoE, LVC-5000-A5: PoE x4, IEEE 802.3af, Standard PoE   |
|                     | Others        | External: 5x SMA antenna hole, Remote Power switch<br>Internal: Lanner Proprietary DI/O   |
| Power Input         |               | +9~36VDC input range, with ignition delay on/off control  |
| PoE Power Module    |               | Internal integrated   |
| OS Support          |               | Linux: Redhat Enterprise 5/ Fedora 14. Linux Kernel 2.6.18 or later<br>Windows: XP embedded ; Win7 Pro FES/Embedded; Win8                       |
| Certifications      |               | CE, FCC Class A, E13, RoHS  |
| Compliance          |               | Vibration: MIL-STD-810G, Method 514.6<br>Shock:MIL-STD-810G, Method 516.6   |
| Operating Tem-      | Extended      | With Selected Industrial Components: -20~55°C/-4~131°F  |
| perature Range      | Standard      | With Commercial Components: -5~45°C / 23~113°F  |



# **Ordering Information**

| LVC-5000-A1 | Intel® Celeron 1047UE In-Vehicle Mobile DVR Computer, with 8Ch Video Input, 4GB DDR3 Memory included, 2.5" Removable Drive Bay, Mini-PCle x2 with two SIM card reader, Intel GbE x4, USB x4, COM x2, DIO, Audio, Power input +9~36Vdc with Ignition, Suspension Kit included.                                 |
|-------------|---|
| LVC-5000-A5 | IntelR i7-3517UE In-Vehicle Hybrid NVR Computer, with 8Ch Analogue Video Input and Intel GbE x4 Ports PoE for IP cameras. 4GB DDR3 Memory included, 2.5" Removable Drive Bay, Mini-PCIe x2 with two SIM card reader, USB x4, COM x2, DIO, Audio, Power input +9~36Vdc with Ignition, Suspension Kit included. |