

Network Thermal Imaging Camera with integrated Video Analytics



LTV-ITCSL-600

Key Features:

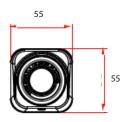
- 384 x 288 Resolution
- $\bullet\,17\,\mu m\,Microbolometer$
- Field of Vision: 35°, 28°, 16°, 9°
- Video Frame Rate 30Hz
- H.264, MPEG-4, MJPEG
- Integrated Intelligent Video Analytics (VCA)

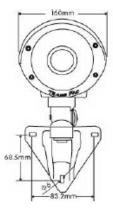


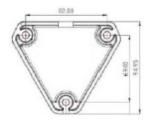
	Sensor Unit	17 µm uncooled Vanadium Oxid Microbolometer			
Camera Module	Effective Pixels	384 x 288			
	Sensor Scanning	Progressive Scan			
	Spectrum	8 - 14 μm			
		15mm, F1.4 (Field of Vision 35°)			
		19mm, F1.2 (Field of Vision 28°) 35mm, F1.2 (Field of Vision 16°) 60mm, F1.2 (Field of Vision 9°)			
	Lens (optional)				
		Further lenses upon request			
	NEDT	<50mK			
	Compression	H.264, MPEG-4, MJPEG			
	Frame Rate	30Hz			
Video	Number of Streams	Dual Stream, configurable			
	Resolution	384 x 288 (scalable from CIF to D1)			
	Motion Detection	Integrated (DSP)			
	Burnt-in Text	Video Stream Text Display (DSP)			
Audio	Input / Output	1-ch / 1-ch			
	Compression	G.711			
	Digital Input / Output	1-ch (either potential-free or potential-loaded contact) / 1-ch (potential-free contact)			
	Serial Interface	RS-485			
Function	Network	10 / 100 Base-T			
	Protocolls	TCP/IP, UDP/IP, HTTP, RTSP, RTCP, RTP/UDP, RTP/TCP, SNTP, mDNS, UPnP, SMTP, IGMP, DHCP, FTP, DDNS, SSL v2/v3, IEEE 802.1X, SNMP v2/v3			
	SD Memory Card	MicroSD supported			
	Input Voltage	12V DC			
Operating Conditions	Power Over Ethernet	Supported (IEEE 802.3af) Camera Unit			
	Power Consumption	6-8 Watt			
Operating Conditions	Temperature	0°C+ 50°C (32°F 122°F)			
	Humidity	Up to 85% rel. Humidity (non-condensing)			
Casing – Camera Unit	Material / Color	die-cast Aluminium / grey			
	Dimensions (D x H x W)	55 x 55 x 120 mm / 350g			
	Versions	LTV-ODE-1000T-230: Power Supply: AC 90V ~ 230V, 50/60 Hz LTV-ODE-1000T-PoE: Power Supply: PoE+			
	Material	die-cast Aluminium, germanium pane			
Weather Proof Casing	Heater / Cooler	0°C (ON) / 10°C (OFF) // 35°C (ON) / 25°C (OFF)			
	Operating Temperature	LTV-ODE-1000T-230: -40°C +50°C LTV-ODE-1000T-PoE: -20°C +50°C			
	Color	Ivory / Power-Coating			
	Dimensions (D x H x W)	425 × 165 × 160mm			
	Weight / Weatherproof	5kg / IP66			



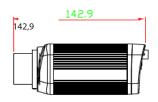
Dimensions (Unit: mm)

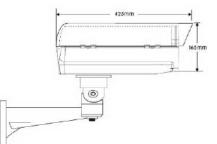






Video Analytics (standard)	High Performance	Advanced Algorithms for object recognition, low error rate		
	Easy Operation	Innovative Web Browser Interface		
	Detection Zones	Up to 40 adjustable Detection Zones & Lines, combinab- le with up to 60 VCA Detection Filtres		
	Image Display	Real-time Display of Object data & events		
	VCA Compensation for Camera Movement	Improves the VCA Performance of mechanically movable cameras		
	Sabotage Protection	Detects attempts to manipulate the camera image via VCA detection		
	Event-Controlled Reaction	Event Notification via TCP/IP, HTTP, Multicast Service or Email with text message and single image attachment, DO Output Contact, Videoclip Saving on FTP server, local recording on SD Card		
Video Content Ana- lysis (optional)	3D VCA Calibration	Matching of Camera Installation Parameters via 3D grid and virtual objects for correct detection of object size by the VCA		
	Object Classification	Definition of several Object Classes and inclusion of these into the rules for VCA Alert Triggering		
	Detection Filtres	Object: regognition of direction, velocity, stop, classifica- tion, time spent		
Video Content Analysis (optional)	VCA Function Exten- sion	VCAcountIP, VCAaccessIP, VCAsurveillanceIP, VCAadvancedIP		
	Detection Filtres	Object: enter, leave, appear, disappear, stop, direction, time spent, velocity, trespassing, classification		
	VCA Functions	Up to 20 images displayed showing the sum of - Counting lines mode for optimal detection of persons and vehicles - Meta data transmission of VCA Events (RTSP/RTP) - VCA Calibration for correct determination of object sizes		
Image Stabilization (optional)	STBelP	Eliminates / Reduces image vibrations		
Accessories	Mounting Holder	LTV-PMA-1000T – Pole Adapter LTV-CMA-1000T – Corner Adapter		







The LTV-ITCSL-600 is worldwide among the first IP Thermal Imaging Cameras, which combines the innovative thermal imaging technology with the capability of reliable intelligent video analytics (integrated in standard version). On the one hand, as you may expect from thermal imaging, wide ranges are captured, on top of that on the other the optionally available VCA functions, as e.g. object recognition, person and vehicle counting, time spent and many more, offer many-sided and reliable methods of application.

Interesting Prize / Performance Ratio

Thanks to reliable detection methods the LTV-ITCSL-600 now suits new areas of application, such as general Video Security, vehicle counting, traffic congestion surveillance etc.

Advanced Thermal Imaging Technology

Equipped with a 17µm Microbolometer high-performance sensor combined with specially developed Thermal Imaging lenses the LTV-ITCSL-600 is among the most modern camera systems available. It works with wave lengths of 8-14 µm and recognizes the heat radiated by objects.

Wide Scope of Observation and High Resolution

The LTV-ITCSL-600 offers wide angle lenses with angles of up to 35° for an optimal image display. The LTV-ITCSL-600 is available with a standard resolution of 384 x 288P.

Video Analytics

The integration of LTV video analytics into the LTV-ITCSL-600 significantly improves detection performance. The LTV-ITCSL-600 offers high-performance object recognition at a low false alert rate.

Ordering Information

The LTV-ITCSL-600 is designed for a number of applications. The models are available with several Focal Lengths. The Camera is by default equipped with a VCAdetect license, to guarantee optimal detection performance along with Thermal Imaging technology upon outdoor use.

Model	Resolution	Frame Rate	Focal ength	Angle	PoE	SD	VCAdetect
LTV-ITCSL-600-F15	384 x 288	30 Hz	15mm	\checkmark	✓	\checkmark	\checkmark
LTV-ITCSL-600-F19	384 x 288	30 Hz	19mm	\checkmark	✓	\checkmark	\checkmark
LTV-ITCSL-600-F35	384 x 288	30 Hz	35mm	\checkmark	\checkmark	\checkmark	\checkmark
LTV-ITCSL-600-F60	384 x 288	30 Hz	60mm	\checkmark	\checkmark	\checkmark	\checkmark