



Vision over Ethernet

THE NEW DECENTRALISED
HARDWARE PLATFORM
WITH POE+



VoE
vision over
ethernet

What's VoE?



Vision over Ethernet is a new image processing concept by VisionTools based on decentralised hardware. The system offers many advantages:

- no control cabinet needed
 - significant saving of foot print and climate control
- low diversity components thus less spare parts
- system enhancement without retooling
- pre-assembled cables in standard lengths

The new image processing concept includes specifically developed hardware, that is perfectly coordinated. It provides the following connections:



- Peripheral power supply with **PoE+ (Power over Ethernet)**
- Fast **Gigabit-Ethernet data transfer** to peripheral hardware
- **Profinet** and **Profibus-Link** to the control system (PLC)

Hardware

VoE - SlyBox

- 15 - 21,5" Touchscreen Display Full HD
- Intel Core i7 processor
- Windows 7 / 10 - 64 Bit
- Image analysing software VisionTools V60
- 2x PCIe slot
- Ethernet 1000 MBit
- Closed aluminium housing with passive cooling
- Integrated power supply 24V / 40A
- Supplies 3~ 400-500V, 50/60Hz
- Protection class IP54
- optional with keyboard and mouse
- optional with Euchner-Key-System for user administration



V60



VoE - NETBox



8 Ethernet 1000 MBit/s – switch with PoE+

- **8 Ethernet ports (M12, 8 pin, X-coded)**
 - max. 30 W each port, max. 200 W sum up for all ports
 - Jumbo frames up to 9720 bytes
 - Status LED display: Link, Act, PoE
- **24V DC supply (M12, 4 pin, T-coded)**
- **Potential-free fault alarm contact**
- **High temperature range -40° – +70°C**

VoE - IOBox

In-/ Output module for supply and control of peripheral lighting

- **Module supply with 24V DC**
(M12, 4 pin, T-coded)
or alternatively direct with PoE+
- **Linked with Gigabit Ethernet**
(M12, 8 pin, X-coded)
- **4 Output channels of 4 Ampere**
(M12, 4 pin, A-coded)
- **6 Input channels**
(M12, 4 pin, A-coded)



VoE - Camera

- **Power supplied with POE+**
- **Interface**
 - Ethernet 1000 MBits/s (M12, 8 pin, X-coded)
 - 1x Trigger (M12, 8 pin, A-coded)
 - 4 digital inputs/outputs 24V DC
- **Different sensor sizes and solutions available**
 - 1280 x 1024
 - 1600 x 1200
 - 2500 x 2000
- **Multi-piece protection housing**



LED-ModularLight



- 24V DC supply
- Switching input
- Brightness variably adjustable
- **ModuleLights in different lengths**
 - MDL- 075 - 6 Watt
 - MDL- 150 - 12 Watt
 - MDL- 300 - 24 Watt
 - MDL- 600 - 48 Watt
- High efficient LED-Technology
- Diffuse or with selectable optics Optik (10°/25°)
- In colours white, red and infrared

LED-Spotlight

- 24V DC supply
- Switching input
- Brightness variably adjustable
- High efficient LED-Technology
- Diffuse or with optics (12°)
- In colours white and red



VoE - DATACable

- Permanently flexible ethernet cable - can be used in a drag chain
- CAT6_A compliant
- M12, 8 pin, X-coded plug
<> M12, 8 pin, X-coded plug
- Standard lengths:
5m | 10m | 15m | 25m



VoE - POWERCable

- Permanently flexible current supply cable can be used in a drag chain
- M12, 4 pin, T-coded plug
<> M12, 4 pin, T-coded socket
- Max. current 12A
- Standard lengths:
5m | 10m | 15m | 25m



VoE - Sample configuration

- 1 The **VoE-Touch-PC** is linked to the machine control (**PLC**) and coordinates the data transfer and power supply of the decentralised hardware.
- 2 The **VoE-NETBox** supplies the peripheral hardware with power over ethernet (**PoE+**) and bundles the data transfer of the cameras and IOBox-modules.
- 3 The **VoE-IOBox** controls up to 4 lighting channels and provides power for lighting connections directly on the output channel (with PoE+ only).

The connection of more NETBox- and IOBox-modules allow nearly unlimited system enhancement.

