



vision
without
limits

**Vector Control
Module**

CANTY

PROCESS TECHNOLOGY

BUFFALO

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What is a VCM?

Vector Control Modules (VCM's) are processors to interface with and analyze images from camera systems sold by CANTY that come in three main lines: The Extreme Performance model is a powerful, solid state, fan-less processor able to work in dirty, harsh environments. The VCM LTE is a less powerful version of the Extreme Performance model, but still solid state and fan-less allowing it to work in harsh environments. Lastly, the Rack Mount model is equally powerful to the Extreme Performance, but it includes fans and is intended to fit into a standard rack in a controlled environment with your other electronics.

VCM's are designed to keep project cost low and eliminate the need to spec out and purchase your own separate computer. These machines can be ordered with a variety of outputs including analog (4-20mA), OPC UA, Modbus, and DO's, which allow them to communicate effectively with a PLC or DCS system. Each VCM comes with the ability to hook up to a Wi-Fi or hardwired network to provide Internet and/or remote access. Quick access to CANTY's technical support is available from the press of a button on the embedded operator account's main screen if the VCM is connected to the Internet. CANTY's support team can also be reached easily via phone or email with multiple locations globally to minimize down time.



Features

- Supports up to 6 Cameras (Application Dependent)
- High Speed Analysis
- Easy to install and use
- Fanless or rack mount options
- Windows 10 Embedded
- CANTYVISION™ software installed

Technical Information

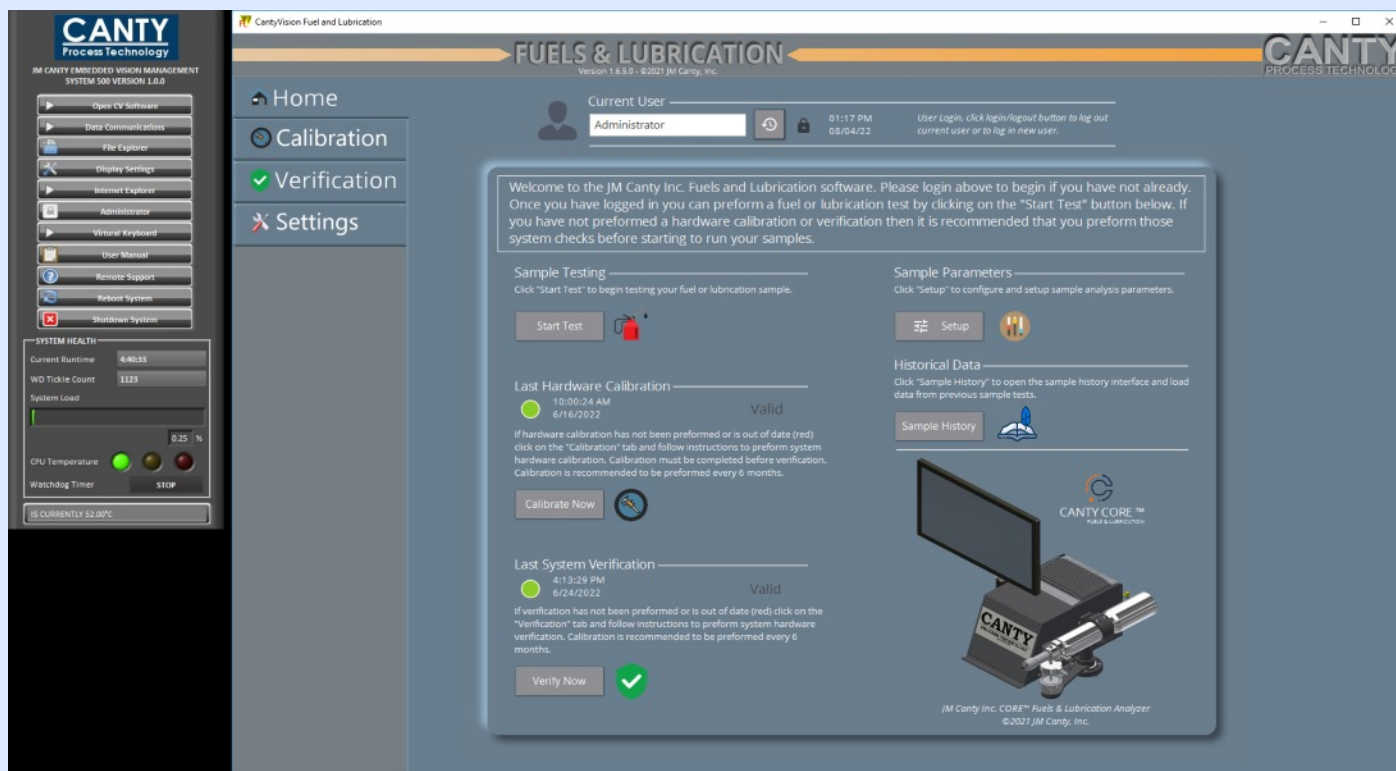
VCM's allow for up to six individual CANTY camera systems to be controlled at once. VCM's are optimized and fully tested with the latest CANTYVISION™ software and incorporate options for analog, digital, OPC and Modbus data outputs. Each VCM comes from CANTY fully configured for easy plug and play operation. Systems come preset to auto start to a custom operators interface which allows for control of multiple CANTY cameras for multiple applications. Windows 10 Enterprise OS provides a secure and easy connection to local networks.

Cyber Security

VCM's come with Windows Defender updated with the latest virus definitions. Windows Defender protects users against viruses and spyware. Windows Firewall is also set up on all new systems. VCM's come with multiple user accounts giving variable levels of access. Systems start up automatically to an operator account which is locked down so that only CANTY software and data outputs can be accessed. Higher level accounts like User Admin allow the customer to change system settings and allow for networking systems to a customer's network provided the user has adequate privileges.

Software Information

All of our VCM's come with software pre-installed and are ready to interface with CANTY cameras out of the box. The operator account makes it simple for operators to see what is going on in your process in real-time with visual verification. The software loaded onto the VCM's have administrative passwords and permissions allowing for complete control over your analysis.



Please note: All cameras must be configured such that there is a direct cat6E or greater Ethernet connection between the camera and the VCM. All cameras cannot be run through additional hardware such as a switch or hub. The Ethernet run between a camera and a VCM cannot be longer than 100m. For longer distances, Canty has available for purchase fiber converters that are rated for a variety of environmental classifications. See TA11950-1024 for details on the fiber converters.

MODEL SELECTIONS - Rackmount VCM



Why Select a Rackmount VCM?

- Fits into standard rack which allows for easy and organized storage
- The fan cooling of the rackmount model allows for it to have the fastest processor of all VCMs leading to the fastest analysis speeds
- RACK MOUNT models are designed for non-industrial environments with air conditioning and clean, filtered air.
- Supports up to 6 cameras

Specifications

- Input Power: 100-240 VAC 50/60 Hz
- Display Options: HDMI, Displayport, DVI
- Physical Dimensions: 15.35" (D) X 19.10" (W) X 5.25" (H) (3U rack)
- All Rackmount VCMs include one LAN connection

Standard Output Options

- Modbus TCP/IP
- ODBQ
- OPC UA (Requires purchase of NET1500-10 License)
- Profibus (Additional Hardware Purchase Required)

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMRN-004	6	2
VCMRN-005	4	2

Optional Output Options

- Analog

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMRA-001	6	2
VCMRA-002	4	2

- Modbus RTU

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMRN-008	4	2

ADD-ON COMPONENTS

Part Number	Features
VCAK-001	MONITOR, KEYBOARD & MOUSE KIT
NET1500-10	OPC-UA LICENSE
VCAK-006	VCM ACCESSORY KIT, DUAL MONITOR DISPLAY TO 1 LARGE MONITOR DISPLAY
VCAK-007	VCM ACCESSORY KIT, MONITOR LONG DISTANCE VIEWING



VCMRN

VCMRN-004 - Support up to 6 cameras **or** 2 analyzers

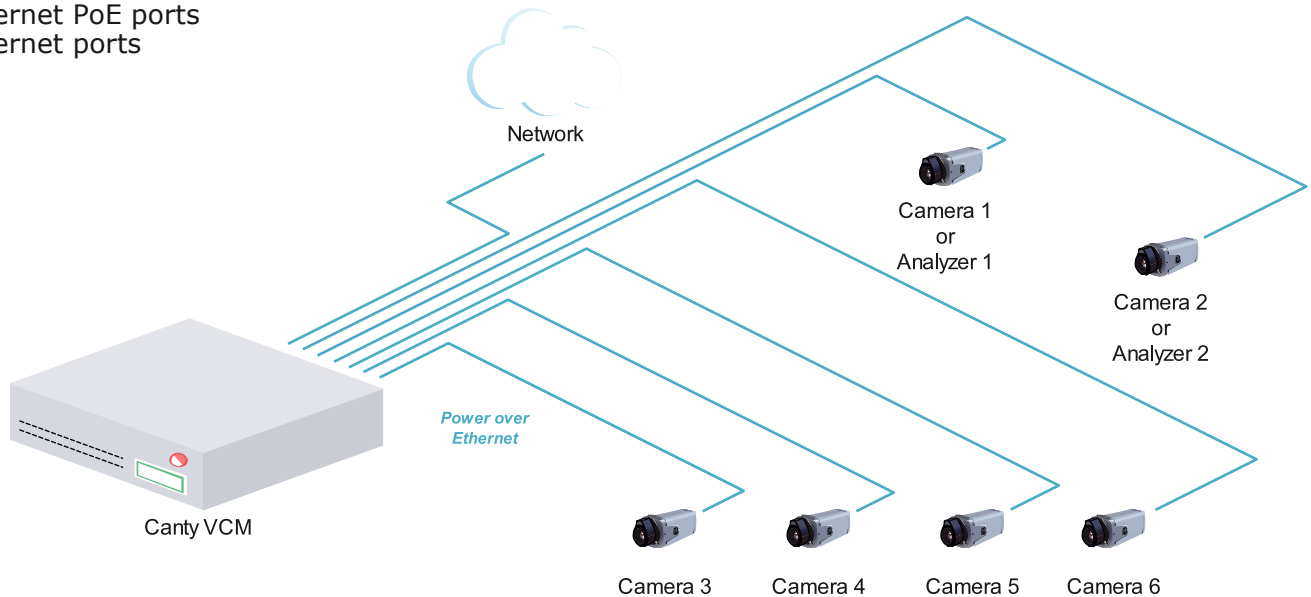
8 Gigabit Ethernet PoE ports

2 Gigabit Ethernet ports

VCMRN-005 - Support up to 4 cameras **or** 2 analyzers

4 Gigabit Ethernet PoE ports

2 Gigabit Ethernet ports



VCMRA

VCMRA-001 - Support up to 6 cameras **or** 2 analyzers

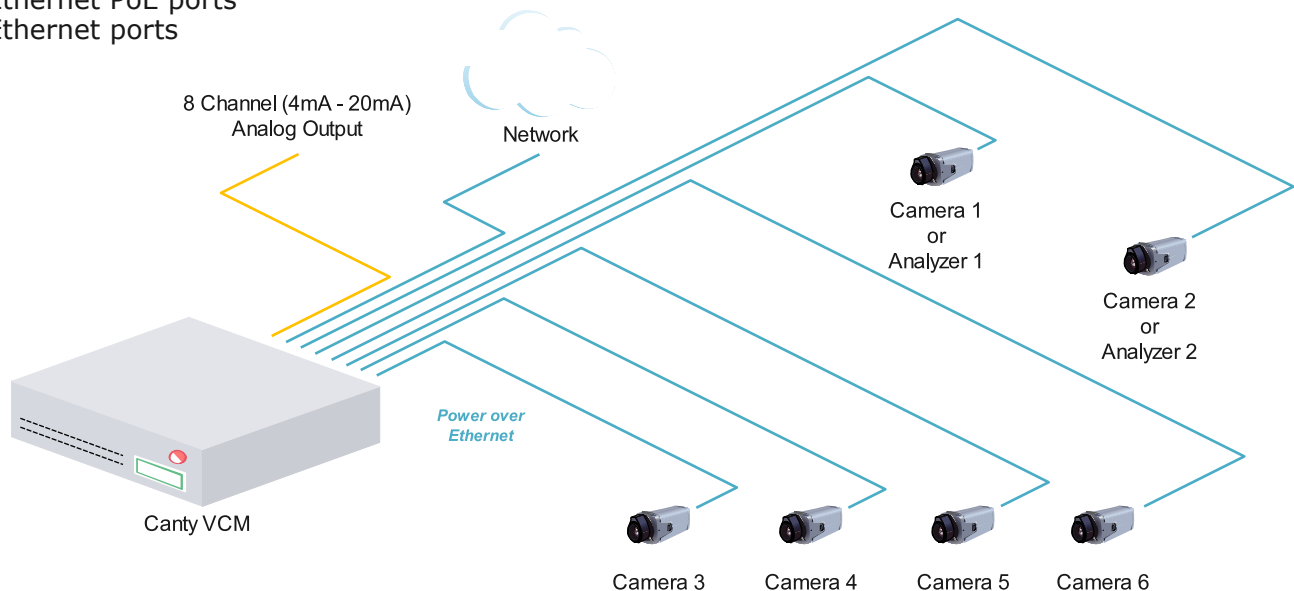
8 Gigabit Ethernet PoE ports

2 Gigabit Ethernet ports

VCMRA-002 - Support up to 4 cameras **or** 2 analyzers

4 Gigabit Ethernet PoE ports

2 Gigabit Ethernet ports



MODEL SELECTIONS - Extreme VCM



Why Select an Extreme VCM?

- Smaller footprint than the rackmount model and wall mountable
- Fanless cooling allows for the unit be used in environments deemed too dusty for rackmount models making it ideal for use in harsh industrial settings
- More powerful than the LTE model
- Supports up to 6 cameras

Specifications

- Input Power: 100-240 VAC 50/60 Hz
- Display Options: Displayport, DVI, VGA
- Physical Dimensions: 8.86" (D) X 9.45" (W) X 3.54" (H)
- All Extreme Performance VCMs contain 8 PoE & 2 non PoE ports

Standard Output Options

- Modbus TCP/IP
- ODBQ
- OPC UA (Requires purchase of NET1500-10 License)
- Profibus (Additional Hardware Purchase Required)
- Modbus RTU

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMEN-004	6	2

Optional Output Options

- Analog

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMEA-001	6	2

ADD-ON COMPONENTS

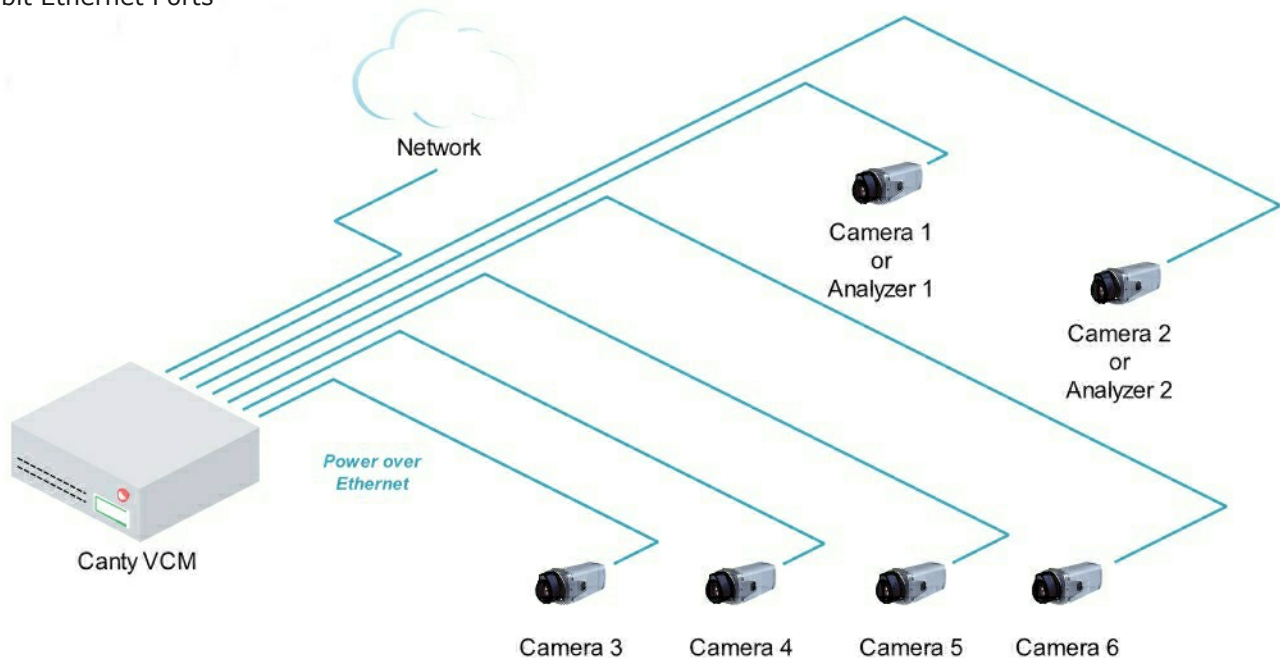
Part Number	Features
VCMAK-001	MONITOR, KEYBOARD & MOUSE KIT
NET1500-10	OPC-UA LICENSE
VCMAK-006	VCM ACCESSORY KIT, DUAL MONITOR DISPLAY TO 1 LARGE MONITOR DISPLAY
VCMAK-007	VCM ACCESSORY KIT, MONITOR LONG DISTANCE VIEWING



VCMEN

VCMEN-004 - Support up to 6 cameras **or** 2 analyzers

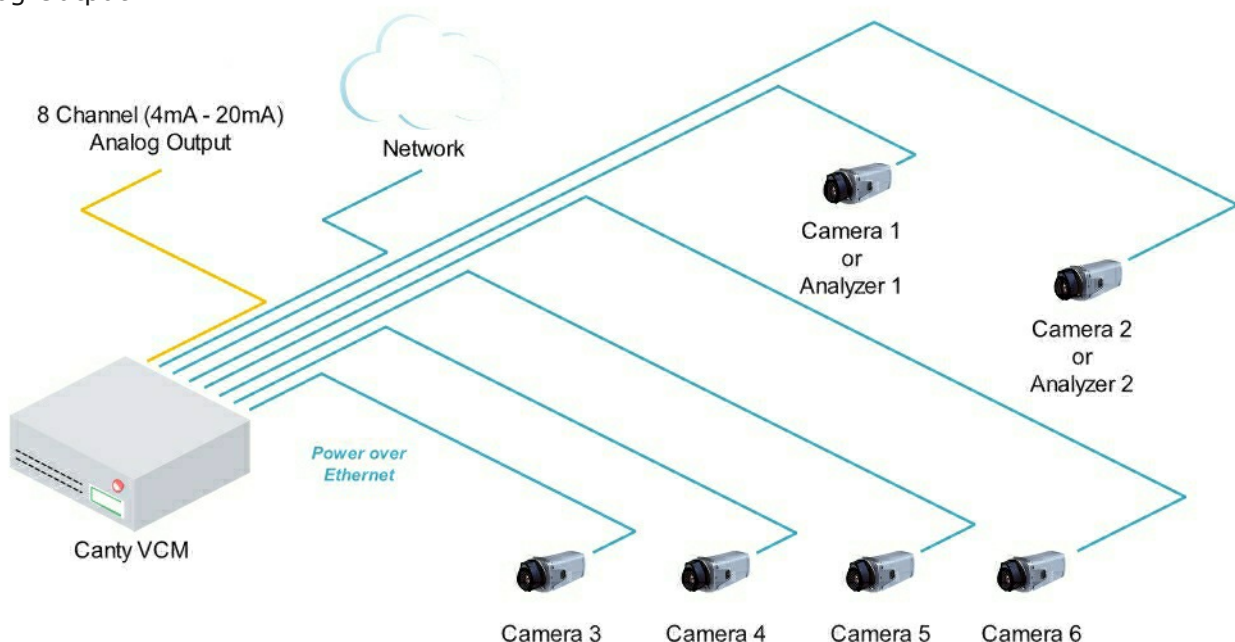
- 8 Gigabit PoE Ports
- 2 Gigabit Ethernet Ports



VCMEA

VCMEA-001 - Support up to 6 cameras **or** 2 analyzers

- 8 Gigabit PoE Ports
- 2 Gigabit Ethernet Ports
- 8 CH Analog Output



MODEL SELECTIONS - LTE VCM



Why Select an LTE VCM?

- Smallest design and din rail mountable
- Fanless cooling allows for the unit be used in environments deemed too dusty for rackmount models making it ideal for use in harsh industrial settings
- Most economical and cost effective option
- Supports 1 to 3 cameras

Specifications

- Input Power: 100-240 VAC 50/60 Hz
- Display Options: Displayport, HDMI
- Physical Dimensions: 4.55" (D) X 6.92" (W) X 2.54" (H)

Standard Output Options

- Modbus TCP/IP
- ODBQ
- OPC UA (Requires purchase of NET1500-10 License)
- Profibus (Additional Hardware Purchase Required)
- Modbus RTU

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMLN-023	3	1



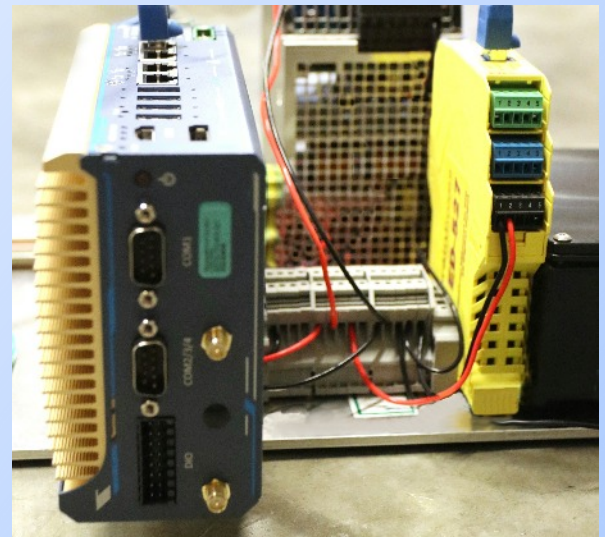
Optional Output Options

- 4 Channel Analog

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMLA-021	2	1

- 6 Channel

Part Number	Number of Cauty Cameras Supported	Number of Particle Analyzers Supported
VCMLA-022	2	1

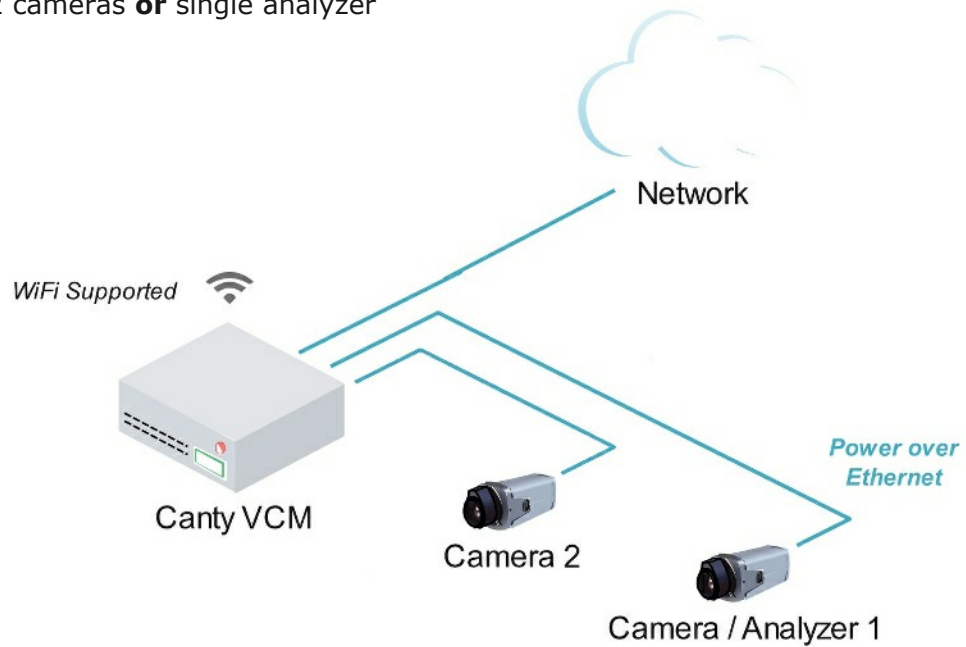


ADD-ON COMPONENTS	
Part Number	Features
VCMMAK-001	MONITOR, KEYBOARD & MOUSE KIT
NET1500-10	OPC-UA LICENSE
VCMMAK-006	VCM ACCESSORY KIT, DUAL MONITOR DISPLAY TO 1 LARGE MONITOR DISPLAY
VCMMAK-007	VCM ACCESSORY KIT, MONITOR LONG DISTANCE VIEWING



VCMLN

VCMLN-023 - Support for 2 cameras **or** single analyzer



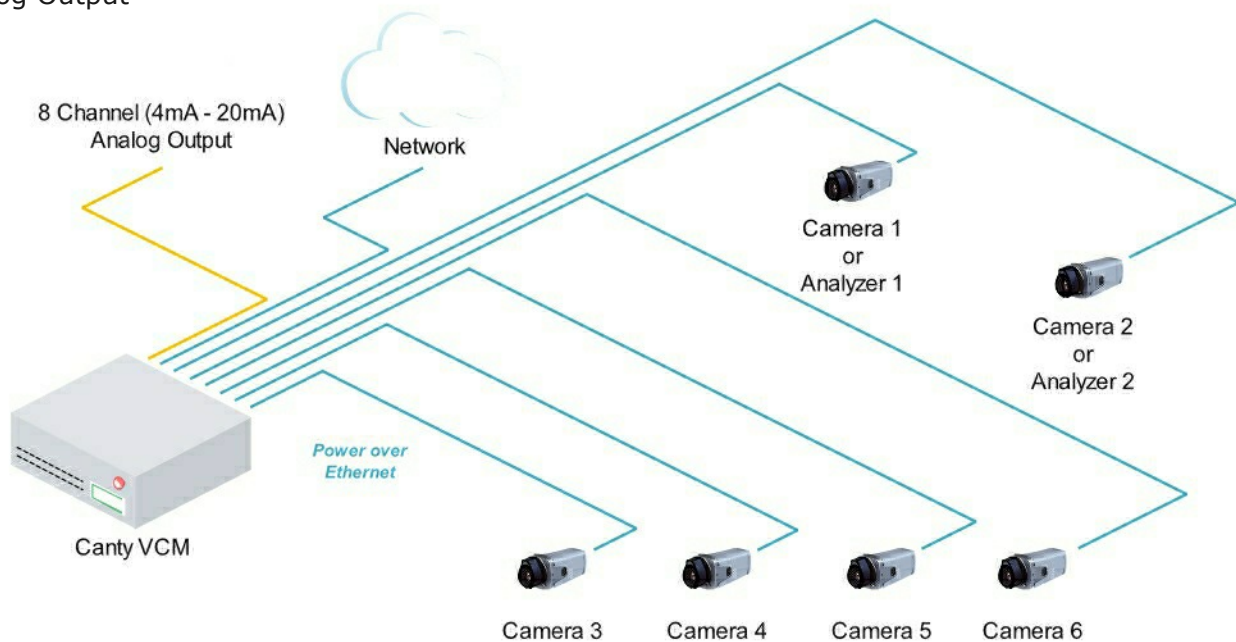
VCMLA

VCMLA-021 - Support for 2 cameras **or** single analyzer

- 4 CH Analog Output

VCMLA-022 - Support for 2 cameras **or** single analyzer

- 6 CH Analog Output



CANTY'S GOAL IS TO PROVIDE EQUIPMENT TO ENHANCE PROCESS CONTROL AND YIELD. WE ACCOMPLISH THIS BY DESIGNING, MANUFACTURING, AND SERVICING THE FINEST EQUIPMENT IN THE WORLD.

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BP
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AND YOU!!!



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