



PLC
+HMI
ALL IN ONE™

Powerful Software

Outstanding Support

Complete Range of PLCs

VISION
SAMBA
JAZZ



Powerful Software

Single, intuitive, feature-rich programming environment & utilities suite

Unitronics provides a powerful solution; our software is more than a match for any requirement. Hardware configuration, HMI design and communications are all programmed in a single, intuitive software environment, which includes an extensive utilities suite with DataExport, Remote Access and more. This all-in-one approach reduces the time and effort needed to program a unit. Not only is our software user-friendly, all of Unitronics software and utilities are provided at no extra cost.

Outstanding Support

Expert support without fees or tiers

“The support, both via telephone, email and the Unitronics forum, is among the best in the industry” says Jose Padro, President of Alpha Systems, Inc. Unitronics offers best-of-breed technical support to every user without added fees, tiers, or hoops to jump through. Every question we receive is answered by an experienced member of our support team. The same team of experts is available at every step of the project.



Complete Range of PLCs

A range of product lines to match your exact requirements

With 25 years of experience in automation, Unitronics has established several PLC lines with options to meet a diverse range of requirements. Our R&D strategy is to stay close to the market; we listen to our customer's current needs and future plans and develop new solutions accordingly. This strategy enables us to offer simple tried-and-true solutions alongside cutting edge innovations.

PLC
+ HMI
ALL IN ONE™

Unitronics designs, manufactures, and markets quality PLCs for the global market. Easy to use, efficient, and affordable, our products have been automating processes, systems, and stand-alone applications since 1989.

We maintain more than 160 distributors in over 55 countries around the globe, enabling our customers to purchase our products with local marketing support. Unitronics' field-proven PLCs automate hundreds of thousands of installations in diverse fields: petrochemical, automotive, food processing, plastic & textile, energy & environment, water & waste water management - anywhere automated processes are required.

Our clients include:

Coca-Cola, General Motors, Michelin, Tupperware, Intel, Bayer, Colgate-Palmolive, Land Instruments, Mercedes-Benz, Agfa, Tyson Foods, Pirelli, Fiat, Samsonite.

Download Unitronics' App:



Table of Contents **Page**

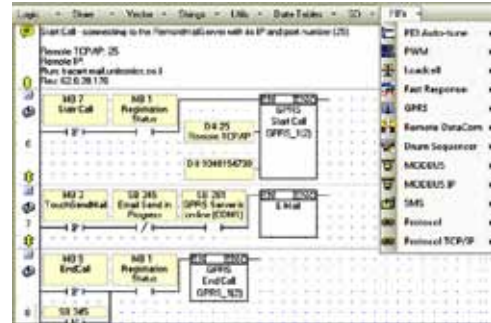
Integrated Programming Environment.....6
Utilities.....7
Vision 1210 / 1040.....8
Vision 700.....10
Vision 570J / 570 / 560.....12
Vision 430.....14
Vision 350J / 350.....16
Vision 130J / 130.....18
Vision 120.....20
Vision 200.....21
SAMBA.....22
JAZZ.....24
M9126
I/O Expansion Modules28
Snap-in I/O Modules29
Network Configuration30

Powerful software – included with your All-in-One package

A single, intuitive environment for all of your application needs



Hardware Configuration
Intuitive set up: controller, I/Os, and COM channels



Ladder Programming
Rapidly drag & drop elements and Function Blocks



HMI Application
Create beautiful HMI displays – includes rich image library



Alarms: Built-in Screens
Effectively alert staff via Alarm screens

Project Explorer



Trend Graphs
Display dynamic values in real-time



Web Server
Display and edit application values via browser

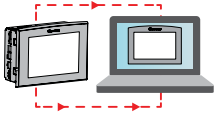

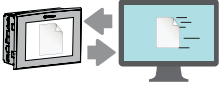




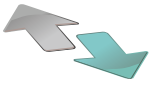


Languages - String Library
Instantly switch HMI language via screen touch



Data Tables
Create logs, import/export data, implement recipes

Software features vary according to controller model

Smart Utilities – Remote Access, Efficient Data Management and more

Utility Name	Function	Key Features	Targeted Users
Remote Access 	View and control a PLC directly from PC, via local or remote connection	<ul style="list-style-type: none"> View an HMI panel; use the PC keyboard + mouse to run the HMI application Operand and Data Table values: view values during runtime, import and export values to/from Excel/.csv files 	<ul style="list-style-type: none"> Operators requiring Remote Access System integrators: remote debugging, troubleshooting, fault-finding
Remote Operator 	Simultaneously view and operate the HMI panels of multiple PLCs in multiple locations	<ul style="list-style-type: none"> Easily place HMI panels side-by-side to monitor distributed systems, or applications in several locations Run the HMI applications via PC keyboard + mouse 	<ul style="list-style-type: none"> Control room operators Installation Managers
DataXport 	Create Data Logs from Data Tables and operand values in PLCs	<ul style="list-style-type: none"> Harvest data from multiple PLCs - on demand or according to time/date Export the data to Excel/CSV files Automatically email files 	<ul style="list-style-type: none"> Data analysts Plant managers Process engineers
UniDownload Designer 	Create compressed VisiLogic / U90Ladder applications(.udc files) for secure installation in local or remote PLCs	<ul style="list-style-type: none"> Prevent end-users from uploading and opening the application Include an OS to be installed at download Set a Download channel, restrict end-user actions after installation and more 	OEMs / System Integrators can: <ul style="list-style-type: none"> Protect source code. Enable customers to install an application without using VisiLogic or U90Ladder
Download Manager & UniDownloader 	Securely install .udc applications in local or remote PLCs	<ul style="list-style-type: none"> Download Manager: installs the same application in multiple PLCs UniDownloader: installs an application in a single PLC 	<ul style="list-style-type: none"> OEMs / System Integrators in installations with high security requirements
SD Card Suite 	Remotely access and manage SD cards and their data	<ul style="list-style-type: none"> Browse a remote PLC's SD card. Read/write data, including Data Table files View SD card contents - Trends, logs, alarm history, data tables - export to Excel 	<ul style="list-style-type: none"> Data analysts Plant managers Process engineers
UniVision Licensing 	Safeguard your PLC application security	<ul style="list-style-type: none"> Embeds unique licenses in the PLC, which enables application to run only on a licensed PLC Option to activate or deactivate different sections of your application Prevents theft of applications 	<ul style="list-style-type: none"> System integrators OEMs
UniOPC Server 	Exchange data between Unitronics PLCs and OPC-supported software	<ul style="list-style-type: none"> Create channel to connect PLCs to SCADA systems, such as plant control rooms Compliant with the OPC foundation standards 	Control room operators
UniDDE 	Exchange data with Windows based applications	Enables data exchange between Unitronics PLC's and software that supports Microsoft's Dynamic Data Exchange protocols, like Excel.	Control rooms operators
Programming tools for developers 	Easily implement communication between PLC & PC applications	Using ActiveX & .NET communication drivers	Developers

VISION 1210™ /1040™

Advanced PLC from the back-big & beautiful color touchscreen from the front, 12.1" /10.4". Snap-in I/Os for an All-in-One; expand up to 1000 I/Os

Features:

HMI

- Up to 1024 user-designed screens
- 500 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- Micro SD card - log, backup, clone & more
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939 and more
- DF1 Slave
- SNMP agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with 2 isolated RS232/RS485, 1 CANbus, 1 USB programming port; 1 port may be added for serial/Ethernet



V1210
Flat Panel



V1040
Classic Panel

“ I’ve not yet encountered a job that a Unitronics PLC was unable to cover. ”

CE/UL

Timothy Moulder,
Engineer at Black & Decker

	V1040 V1040-T20B	V1210 V1210-T20BJ
Article Number		
I/O Options		
Snap-in I/O Modules	Plug these modules directly into the back of the Vision unit to create a self-contained PLC with up to 62 I/Os. Inputs may include Digital, Analog and Temperature Measurement. Outputs may include Transistor, Relay or Analog (sold separately).	
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus. Expand up to 1000 I/Os.	
Program		
Application Memory	Application Logic: 2MB • Images: 32MB • Fonts: 1MB	
Scan Time	9µsec per 1K of typical application	
Memory Operands	8192 coils, 4096 registers, 512 long integers (32 bit), 256 double words (32 bit unsigned), 64 floats, 384 timers (32 bit), 32 counters Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words	
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data	
SD Card (Micro)	Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs	
USB	1 USB programming port (Mini-B)	
Enhanced Features	Trends: graph any value and display on HMI • Built-in Alarm management system • String Library: instantly switch HMI language	
Operator Panel		
Type	TFT LCD	
Display Backlight Illumination	White LED	
Colors	65,536 colors, 16-bit resolution • Brightness - Adjustable via touchscreen or software	
Display Resolution & Size	800 x 600 pixels (SVGA), 10.4"	800 x 600 pixels (SVGA), 12.1"
Touchscreen	Resistive, Analog	
Keys	9 programmable function keys	Virtual Keyboard
General		
Power Supply	12/24VDC	
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC	
Clock	Real-time clock functions (date and time)	
Environment	IP65/NEMA4X (when panel mounted)	IP66/IP65/NEMA4X (when panel mounted)
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics	

VISION 700™

Advanced PLC from the back - big & beautiful color 7" touchscreen from the front. Snap-in I/Os for an All-in-One; expand up to 1000 I/Os

Features:

HMI

- Up to 1024 user-designed screens
- 500 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- SD card - log, backup, clone & more
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939, and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with mini-USB programming port, 1 RS232/RS485 and 1 Ethernet port. 1 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus

Vision700™ has Ethernet port onboard, that supports 8 sockets, enabling to communicate with 8 devices simultaneously.



V700

“Reliability, ease of use, connectivity and competitive prices are Unitronics’ main strengths.”

Mr. Andrea Della Bosca,
EV srl

	V700 V700-T20BJ
Article Number	
I/O Options	
Snap-in I/O Modules	Plug these modules directly into the back of the Vision unit to create a self-contained PLC with up to 62 I/Os. Inputs may include Digital, Analog, and Temperature measurement. Outputs may include Transistor, Relay, or Analog. (sold separately)
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus
Program	
Application Memory	Application Logic: 2MB • Images: 60MB • Fonts: 1MB
Scan Time	9µsec per 1K of typical application
Memory Operands	8192 coils, 4096 registers, 512 long integers (32-bit), 256 double words (32-bit unsigned), 64 floats, 384 timers (32-bit), 32 counters. Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data
SD Card	Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs
Enhanced Features	Trends: graph any value and display on HMI • Built-in Alarm management system • String Library: instantly switch HMI language
Operator Panel	
Type	TFT LCD
Display Backlight Illumination	White LED
Colors	65,536 colors, 16 bit resolution • Brightness - Adjustable via touchscreen or software
Display Resolution & Size	800 x 480 pixels, 7"
Touchscreen	Resistive, Analog
Keys	Virtual Keyboard
General	
Power Supply	12/24VDC
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC
Clock	Real-time clock functions (date and time)
Environment	IP66/IP65/NEMA4X (when panel mounted)
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics

VISION 570™ /560™

Advanced PLC from the back-big & beautiful color 5.7" touchscreen from the front. Snap-in I/Os for an All-in-One; expand up to 1000 I/Os

Features:

HMI

- Up to 1024 user-designed screens
- 500 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- SD card - log, backup, clone & more
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939 and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with 2 isolated RS232/RS485 and 1 CANbus; In Vision570: 1 USB programming port; 1 port may be added for serial/Ethernet

V560



V570
Classic Panel



V570-J
Flat Panel

“For a first time user, I had a great experience. I look forward to incorporating this brand of product on future jobs.”

Jeremy Charles Keene,
Controls Manager at General Broach Company

	V570		V560
Article Number	V570-57-T20B	V570-57-T20B-J	V560-T25B*
I/O Options			
Snap-in I/O Modules	Plug these modules directly into the back of the Vision unit to create a self-contained PLC with up to 62 I/Os. Inputs may include Digital, Analog, and Temperature measurement. Outputs may include Transistor, Relay, or Analog. (sold separately)		
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus. Expand up to 1000 I/Os		
Program			
Application Memory	Application Logic: 2MB • Images: 12MB • Fonts: 1MB		
Scan Time	9µsec per 1K of typical application		
Memory Operands	8192 coils, 4096 registers, 512 long integers (32-bit), 256 double words (32-bit unsigned), 64 floats, 384 timers (32-bit), 32 counters. Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words		
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data		
SD Card	Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs		
Enhanced Features	Trends: graph any value and display on HMI • Built-in Alarm management system • String Library: instantly switch HMI language		
Operator Panel			
Type	TFT LCD		
Display Backlight Illumination	White LED		
Colors	65,536 colors, 16 bit resolution • Brightness - Adjustable via touchscreen or software		
Display Resolution & Size	320 x 240 pixels (QVGA), 5.7"		
Touchscreen	Resistive, Analog		
Keys	Virtual Keyboard	24 programmable keys. Labeling options – function keys or customized	
General			
Power Supply	12/24VDC		
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC		
Clock	Real-time clock functions (date and time)		
Environment	IP65/NEMA4X (when panel mounted)	IP66/IP65/NEMA4X (when panel mounted)	IP65/NEMA4X (when panel mounted)
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics		

* Not yet UL certified

VISION 430™

Advanced PLC integrated with a 4.3" wide aspect color touchscreen. Includes an onboard I/O configuration; expand up to 512 I/Os

Features:

HMI

- 1024 user-designed screens and 250 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- Micro SD card - log, backup, clone & more
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939 and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with mini-USB programming port and 1 RS232/RS485 ; 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus



V430

“The huge advantage of this PLC was that - with everything built-in - the communications and use of tags in the HMI was so simple and intuitive.”

Ashley Parr,
HPS

V430										
Article Number	V430-J-B1	V430-J-RH2	V430-J-R34	V430-J-TR34	V430-J-RH6	V430-J-RA22	V430-J-TRA22	V430-J-T2	V430-J-T38	V430-J-TA24
	No onboard I/Os	10 Digital 2 D/A Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	20 Digital 2 D/A Inputs ¹ 12 Relay Outputs	20 Digital 2 D/A Inputs ¹ 8 Relay 4 High speed Transistor Outputs	6 Digital, 2 D/A 4 Analog Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/ Digital ¹ Inputs 4 Relay, 2 Analog Outputs	8 Digital, 2 D/A 2 PT100/TC/ Digital ¹ Inputs 4 Relay, 2 Analog 4 High-speed Transistor Outputs	10 Digital 2 D/A Inputs ¹ 12 Transistor Outputs	20 Digital 2 D/A Inputs ¹ 16 Transistor Outputs	8 Digital 2 D/A, 2 PT100/ TC/Digital ¹ Inputs 10 Transistor 2 Analog Outputs
Inputs										
Digital pnp/npn		12	22	22	8	12	12	12	22	12
HSC/Shaft-Encoder/ Max. Freq. Measurer ^{2&3}		3 200kHz ⁴ 32-bit	3 30kHz 32-bit	3 200kHz ⁴ 32-bit	1 200kHz ⁴ 32-bit	1 30kHz 32-bit	1 200kHz ⁴ 32-bit	3 30kHz 32-bit	2 30kHz 32-bit	1 30kHz 32-bit
Analog	None	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit,0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA, 4-20mA and 4 10-bit, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA, 4-20mA
Temperature Measurement		None	None	None	None	2 PT100/TC	2 PT100/TC	None	None	2 PT100/TC
Outputs	None									
Digital		6 relay	12 relay	8 relay	6 relay	8 relay	4 relay	12 pnp	16 pnp	10 pnp
High-Speed Outputs/PWM		None	None	4 npn (3 PTO) 200kHz max	None	None	4 npn (2 PTO) 200kHz max	7 0.5kHz	7 0.5kHz	5 0.5kHz
Analog		None	None	None	None	2 12-bit 0-10V, 4-20mA	2 12-bit 0-10V, 4-20mA	None	None	2 12-bit 0-10V, 4-20mA
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus. Expand up to 512 I/Os									
Program										
Application Memory	Application Logic: 512K • Images: 12MB • Fonts: 1MB									
Scan Time	15µ sec per 1K of typical application									
Memory Operands	8192 coils, 4096 registers, 512 long integers (32-bit), 256 double words (32-bit unsigned), 64 floats, 384 timers (32-bit), 32 counters Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words									
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data									
SD Card (Micro)	Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs									
Enhanced Features	Trends: graph any value and display on HMI • String Library: instantly switch HMI language									
Operator Panel										
Type	TFT LCD • 65,536 colors, 16-bit resolution • Brightness - Adjustable via touchscreen or software									
Display	Resolution: 480x272 pixels • Size: 4.3"									
Touchscreen	Resistive, Analog									
Keys	5 programmable keys. Labeling options - function keys, arrows, or customized									
General										
Power Supply	24VDC, except for V430-J-B1, which is 12/24VDC									
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC									
Clock	Real-time clock functions (date and time)									
Environment	IP66/IP65/NEMA4X (when panel mounted)									
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics									

¹ Adapt specific inputs to function as digital or analog, and in certain models as TC or PT100. This reduces the number of free digital inputs. For example, V430-J-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4, leaving 8 free.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

⁴ This specification depends upon driver type.

VISION 350™

Advanced PLC integrated with a 3.5" color touchscreen. Includes an onboard I/O configuration; expand up to 512 I/Os

Features:

HMI

- 1024 user-designed screens
- 250 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- Micro SD card - log, backup, clone & more
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939 and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with 1 RS232/RS485; 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus



V350-J
Flat Panel



V350
Classic Panel



NEW! Extended temperature range unit, operational temperature between -30°C to 60°C.
Available with classic or flat panel design
Extended temperature options also available for Ethernet and CANBus cards.

Classic panel p/n: V350-S-TA24, Flat panel p/n: V350-JS-TA24, CANBus p/n: V100-S-CAN Ethernet p/n V100-S-ET2

“There were significant cost savings using the Unitronics PLC.”



Justin Butler,
Senior Electrical Engineer at Energy Plant Solutions

		V350									V350-S-TA24 V350-JS-TA24
Article Number	Classic Panel	V350-35-B1	V350-35-TR20	V350-35-R34	V350-35-TR34	V350-35-TR6	V350-35-RA22	V350-35-TRA22	V350-35-T2	V350-35-T38	V350-35-TA24
	Flat Panel	V350-J-B1	V350-J-TR20	V350-J-R34	V350-J-TR34	V350-J-TR6	V350-J-RA22	V350-J-TRA22	V350-J-T2	V350-J-T38	V350-J-TA24
		No onboard I/Os	10 Digital 2 D/A Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	20 Digital 2 D/A Inputs ¹ 12 Relay Outputs	20 Digital 2 D/A Inputs ¹ 8 Relay 4 High speed Transistor Outputs	6 Digital, 2 D/A 4 Analog Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/ Digital ¹ Inputs 8 Relay 2 Analog Outputs	8 Digital, 2 D/A 2 PT100/TC/ Digital ¹ Inputs 4 Relay, 2 Analog 4 High-speed Transistor Outputs	10 Digital 2 D/A Inputs ¹ 12 Transistor Outputs	20 Digital 2 D/A Inputs ¹ 16 Transistor Outputs	8 Digital 2 D/A, 2 PT100/ TC/Digital ¹ Inputs 10 Transistor 2 Analog Outputs
Inputs											
Digital pnp/npn			12	22	22	8	12	12	12	22	12
HSC/Shaft-Encoder/ Max. Freq. Measurer ^{2&3}			3 200kHz ⁴ 32-bit	3 30kHz 32-bit	3 200kHz ⁴ 32-bit	1 200kHz ⁴ 32-bit	1 30kHz 32-bit	1 200kHz ⁴ 32-bit	3 30kHz 32-bit	2 30kHz 32-bit	1 30kHz 32-bit
Analog		None	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit,0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA, 4-20mA and 4 10-bit, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA, 4-20mA
Temperature Measurement			None	None	None	None	2 PT100/TC	2 PT100/TC	None	None	2 PT100/TC
Outputs											
Digital		None	6 relay	12 relay	8 relay	6 relay	8 relay	4 relay	12 pnp	16 pnp	10 pnp
High-Speed Outputs/ PWM		None	2 npn (2 PTO) 200kHz max	None	4 npn (3 PTO) 200kHz max	2 npn (2 PTO) 200kHz max	None	2 npn (2 PTO) 200kHz max	7 0.5kHz	7 0.5kHz	5 0.5kHz
Analog			None	None	None	None	2 12-bit 0-10V, 4-20mA	2 12-bit 0-10V, 4-20mA	None	None	2 12-bit 0-10V, 4-20mA
I/O Expansion		Local or Remote I/Os may be added via expansion port or via CANbus. Expand up to 512 I/Os									
Program											
Application Memory		Application Logic: 1MB • Images: 6MB • Fonts: 512K									
Scan Time		15µ sec per 1K of typical application									
Memory Operands		8192 coils, 4096 registers, 512 long integers (32-bit), 256 double words (32-bit unsigned), 64 floats, 384 timers (32-bit), 32 counters Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words									
Data Tables		120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data									
SD Card (Micro)		Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs									
Enhanced Features		Trends: graph any value and display on HMI • String Library: instantly switch HMI language									
Operator Panel											
Type		TFT LCD • 65,536 colors, 16-bit resolution • Brightness - Adjustable via touchscreen or software									
Display		Resolution: 320 x 240 pixels (QVGA) • Size: 3.5"									
Touchscreen		Resistive, Analog									
Keys		5 programmable keys. Labeling options - function keys, arrows, or customized									
General											
Power Supply		24VDC, except for V350-35-B1, which is 12/24VDC									
Battery		7 years typical at 25°C, battery back-up for all memory sections and RTC									
Clock		Real-time clock functions (date and time)									
Environment		IP66/IP65/NEMA4X (when panel mounted)									
Standard		CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics									

¹ Adapt specific inputs to function as digital or analog, and in certain models as TC or PT100. This reduces the number of free digital inputs. For example, V350-35-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4, leaving 8 free.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

⁴ This specification depends upon driver type.

VISION 130™

Palm-size, powerful PLC with built-in, black & white LCD 1.3" graphic display, keypad, & onboard I/O configuration, expand up to 256 I/Os

Features:

HMI

- 1024 user-designed screens
- 400 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 24 independent loops
- Recipe programs and datalogging via Data Tables
- Micro SD card - log, backup, clone & more
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Web server: Use built-in HTML pages, or design complex pages to view and edit PLC data via the Internet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939 and more
- DF1 Slave
- SNMP Agent V1
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with 1 RS232/RS485; 2 ports may be added: 1 Serial/Ethernet/Profibus and 1 CANbus



V130-J
Flat Panel



V130
Classic Panel

“The perfect solution for our need, the Vision130™ is easy to program, user-friendly and backed up with responsive tech support.”



Michael Lamore,
President of Barrier1

		V130									
Article Number	Classic Panel	V130-33-B1	V130-33-TR20	V130-33-R34	V130-33-TR34	V130-33-TR6	V130-33-RA22	V130-33-TRA22	V130-33-T2	V130-33-T38	V130-33-TA24
	Flat Panel	V130-J-B1	V130-J-TR20	V130-J-R34	V130-J-TR34	V130-J-TR6	V130-J-RA22	V130-J-TRA22	V130-J-T2	V130-J-T38	V130-J-TA24
		No onboard I/Os	10 Digital 2 D/A Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	20 Digital 2 D/A Inputs ¹ 12 Relay Outputs	20 Digital 2 D/A Inputs ¹ 8 Relay 4 High speed Transistor Outputs	6 Digital, 2 D/A 4 Analog Inputs ¹ 6 Relay Outputs 2 High-speed Transistor Outputs	8 Digital 2 D/A, 2 PT100/TC/ Digital ¹ Inputs 8 Relay 2 Analog Outputs	8 Digital, 2 D/A 2 PT100/TC/ Digital ¹ Inputs 4 Relay, 2 Analog 4 High-speed Transistor Outputs	10 Digital 2 D/A Inputs ¹ 12 Transistor Outputs	20 Digital 2 D/A Inputs ¹ 16 Transistor Outputs	8 Digital 2 D/A, 2 PT100/ TC/Digital ¹ Inputs 10 Transistor 2 Analog Outputs
Inputs											
Digital pnp/npn			12	22	22	8	12	12	12	22	12
HSC/Shaft-Encoder/ Max. Freq. Measurer ^{2&3}			3 200kHz ⁴ 32-bit	3 30kHz 32-bit	3 200kHz ⁴ 32-bit	1 200kHz ⁴ 32-bit	1 30kHz 32-bit	1 200kHz ⁴ 32-bit	3 30kHz 32-bit	2 30kHz 32-bit	1 30kHz 32-bit
Analog		None	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit,0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA, 4-20mA and 4 10-bit, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	2 (2 modes) Normal: 14-bit Fast: 12-bit 0-10V, 0-20mA, 4-20mA
Temperature Measurement			None	None	None	None	2 PT100/TC	2 PT100/TC	None	None	2 PT100/TC
Outputs											
Digital		None	6 relay	12 relay	8 relay	6 relay	8 relay	4 relay	12 pnp	16 pnp	10 pnp
High-Speed Outputs/ PWM		None	2 npn (2 PTO) 200kHz max	None	4 npn (3 PTO) 200kHz max	2 npn (2 PTO) 200kHz max	None	4 npn (2 PTO) 200kHz max	7 0.5kHz	7 0.5kHz	5 0.5kHz
Analog			None	None	None	None	2 12-bit 0-10V, 4-20mA	2 12-bit 0-10V, 4-20mA	None	None	2 12-bit 0-10V, 4-20mA
I/O Expansion											
Local or Remote I/Os may be added via expansion port or via CANbus. Expand up to 256 I/Os											
Program											
Application Memory Application Logic: 512K • Images: 256K • Fonts: 128K											
Scan Time 20µ sec per 1K of typical application											
Memory Operands 4096 coils, 2048 registers, 256 long integers (32-bit), 64 double words (32-bit unsigned), 24 floats, 192 timers (32-bit), 24 counters Additional non-retainable operands: 1024 X-bits, 512 X-integers, 256 X-long integers, 64 X-double words											
Data Tables 120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data											
SD Card (Micro) Store datalogs, Alarm History, Data Tables, Trend data, export to Excel • Back up Ladder, HMI & OS, clone PLCs											
Enhanced Features Trends: graph any value and display on HMI • Built-in Alarm management system • String Library: instantly switch HMI language											
Operator Panel											
Type Graphic STN LCD, white LED backlight											
Display Resolution: 128 x 64 pixels • Size: 2.4"											
Keys 20, including 10 user labeled keys (slide kit sold separately)											
General											
Power Supply 24VDC, except for V130-33-B1, which is 12/24VDC											
Battery 7 years typical at 25°C, battery back-up for all memory sections and RTC											
Clock Real-time clock functions (date and time)											
Environment IP66/IP65/NEMA4X (when panel mounted)											
Standard CE, UL											
Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics											

¹ In these models certain inputs are adaptable, and can function as either digital, analog, and in certain models also as thermocouple or PT100. Using adaptable inputs reduces the amount of free digital inputs. For example, V130-33-RA22 offers 12 digital inputs. Implementing 2 TC inputs requires 4 digital inputs, leaving 8 free.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

⁴ This specification depends upon driver type.

VISION 120™

Full-function PLC with built-in, monochrome graphic LCD display, keypad, & onboard I/O configuration; expand up to 256 I/Os



120™

HMI

- Up to 255 user-designed screens
- Hundreds of images per application
- HMI graphs & Trends
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 12 independent loops
- Recipe programs and datalogging via Data Tables
- Date & Time-based control

Communication

- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN (in C models only)
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- 2 RS232/RS485 built-in ports

Article Number	V120-22-R1	V120-22-R2C	V120-22-R6C	V120-22-R34	V120-22-T1	V120-22-T38	V120-22-T2C	V120-22-UN2	V120-22-UA2	V120-22-RA22
	10 Digital 1 Analog Inputs 6 Relay Outputs	10 Digital 2 Analog Inputs 6 Relay Outputs	6 Digital 6 Analog Inputs 6 Relay Outputs	20 Digital 2 D/A ¹ Inputs 12 Relay Outputs	12 Digital Inputs 12 Transistor Outputs	22 Digital Inputs 16 Transistor Outputs	10 Digital 2 D/A ¹ Inputs 12 Transistor Outputs	10 Digital 2 D/A/PT100/ TC ¹ Inputs 12 Transistor Outputs	10 Digital 2 D/A/TC ¹ Inputs 10 Transistor 2 Analog Outputs	8 Digital 2 D/A, 2 PT100/ TC/Digital ¹ Inputs 8 Relay 2 Analog Outputs
Inputs										
Digital pnp/npn	10	10	6	22	12	22	12	12	12	12
HSC/Shaft-Encoder/ Max. Freq. Measurer ²	3 10kHz 32-bit	3 10kHz 32-bit	1 10kHz 32-bit	3 10kHz ³ 32-bit	2 10kHz 32-bit	2 10kHz ³ 32-bit	3 10kHz 32-bit	2 10kHz 32-bit	1 10kHz ³ 32-bit	1 10kHz ³ 32-bit
Analog	1 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	6 10-bit, 2 0-10V 0-20mA, 4-20mA and 4 0-20mA 4-20mA	2 10-bit,0- 10V 0-20mA 4-20mA	None	None	2 10-bit 0-10V 0-20mA 4-20mA	2 14-bit 0-10V 0-20mA 4-20mA PT100/TC	2 14-bit 0-10V, 0-20mA 4-20mA TC	2 14-bit 0-10V, 0-20mA 4-20mA
Temperature Measurement	None	None	None	None	None	None	None			2 PT100/TC
Outputs										
Digital	6 relay	6 relay	6 relay	12 relay	12 pnp	16 pnp	12 pnp	12 pnp	10 pnp	8 relay
High-Speed Outputs/ PWM ⁴	None	None	None	None	2, first 2 outputs can function as HSO, 0.5kHz maximum					None
Analog	None	None	None	None	None	None	None	None	2 12-bit 0-10V, 4-20mA	2 12-bit 0-10V, 4-20mA
I/O Expansion	Local or Remote I/Os may be added via expansion port or via CANbus. Expand up to 256 I/Os									
Program										
Application Memory	448K (virtual) Ladder code capacity									
Memory Scan Time	48µ sec per 1K of typical application									
Operands	4096 coils, 2048 registers, 256 long integers (32-bit), 64 double words (32-bit unsigned), 24 floats, 192 timers (32-bit), 24 counters									
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 256K fixed data									
Operator Panel										
Type	Graphic STN LCD									
Display	Resolution: 128 x 64 pixels • Size: 2.4"									
Keys	16 keys									
General										
Power Supply	12/24VDC	12/24VDC	24VDC	24VDC	12/24VDC	24VDC	12/24VDC	12/24VDC	24VDC	24VDC
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC									
Clock	Real-time clock functions (date and time)									
Environment	IP65/NEMA4X (when panel mounted)									
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics									

¹ In these models certain inputs are adaptable, and can function as either digital, analog, and in certain models also as thermocouple or PT100. Using adaptable inputs reduces the amount of free digital inputs. For example, V120-22-UA2 offers 12 digital inputs. Implementing 2 TC inputs requires 4 digital inputs, leaving 8 free.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

⁴ Certain outputs can function as high-speed or PWM outputs.

VISION 200™

Advanced PLCs with an integrated operator panel graphic or touch. Snap-in I/Os to create an All-in-One; expand up to 316 I/Os

HMI






- Up to 255 user-designed screens
- Hundreds of images per application
- HMI graphs & Trends
- Virtual alpha-numeric keypad (in V290 & V530)
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options include high-speed, temperature & weight measurement
- Auto-tune PID, up to 12 independent loops
- Recipe programs and datalogging via Data Tables
- Date & Time-based control

Communication

- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol support
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN (in C models only)
- FB Protocol Utility: enables serial or TCP/IP communications with 3rd-party device; barcode readers, frequency converters, etc.
- Ports: supplied with 1 RS232, 1 RS232/RS485 and 1 CANbus; 1 port may be added for serial/Ethernet
- V280-B25B & V290-B25B Not yet UL certified

	V230™	V260™	V280™	V290™	V530™
					
Article Number	V230-13-B20B	V260-16-B20B	V280-18-B20B	V290-19-B20B	V530-53-B20B
I/O Options					
Snap-in I/O Modules	Plug these modules directly into the back of the Vision unit to create a self-contained PLC with up to 62 I/Os. Inputs may include Digital, Analog and Temperature Measurement. Outputs may include Transistor, Relay or Analog (sold separately)				
I/O Expansion	Local or remote I/Os may be added via expansion port or via CANbus. Expand up to 316 I/Os				
Program					
Application Memory	1MB				
Scan Time	30µsec per 1K of typical application				
Operands	4096 coils, 2048 registers, 256 long integers (32 bit), 64 double words (32 bit unsigned), 24 memory floats, 192 timers, 24 counters				
Data Tables	120K dynamic RAM data (recipe parameters, datalogs, etc.), up to 192K fixed data				
Operator Panel					
Type	STN LCD	Negative blue, STN LCD	Black & White FSTN LCD		
Display Resolution & Size	128 x 64 pixels 3.2"	240 x 64 pixels 5.4"	320 x 240 pixels (QVGA), 4.7" active area	320 x 240 pixels (QVGA), 5.7" active area	
Touch Screen	None	None	Resistive, Analog		
Keys	24 user labeled keys		27 user labeled keys	Virtual keyboard	
General					
Power Supply	12/24VDC				
Battery Back-up	7 years typical at 25°C, back-up for all memory sections and real-time clock (RTC)				
Environment	IP65/NEMA4X (when panel mounted)				
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics				

Full-function PLC with built-in beautiful full-color touch-screen, & onboard I/O configuration. Great look, incredible price.

Features:

HMI

- Display: Color touch-screen
3.5" - 320 x 240, 4.3" - 480 x 272, 7" - 800 x 480
- 24 user-designed screens and 40 images per application
- HMI graphs - color-code Trends
- Built-in alarm screens
- Text String Library - easy localization
- Memory and communication monitoring via HMI - No PC needed

PLC

- I/O options: Digital, Analog, including High-speed
- Auto-tune PID, 2 independent loops
- Recipe programs and data logging via Data Tables
- Date & Time-based control

Communication

- TCP/IP via Ethernet
- Send e-mail function
- SMS messaging
- GPRS/GSM
- Remote Access utilities
- MODBUS protocol supported
- BACnet, M-bus – via 3rd-party converter
- CANbus: CANopen, UniCAN, SAE J1939, and more
- DF1 Slave
- Programming Port: RS232 for 3.5" model, USB for 4.3" & 7"
- 2 ports may be added: 1 Serial (RS232/RS485)/ Ethernet & 1 CANbus



SAMBA 3.5"



SAMBA 4.3"



SAMBA 7"

“It really enhanced our product’s look and flexibility.”

Ralph Hannmann,
President of Alyan Pump Company

		SAMBA	
Article Number		SM35-J-R20	SM35-J-T20
		SM43-J-R20	SM43-J-T20
		New SM70-J-R20	New SM70-J-T20
		10 Digital Inputs 2 Digital /Analog 8 Relay Outputs	10 Digital Inputs 2 Digital /Analog 8 Transistor Outputs
Inputs			
Digital		12	12
HSC/Shaft-Encoder/Max. Freq. Measurer ^{2,3}		1 32-bit 30 kHz	3 32-bit 30 kHz
Analog		2: 10-bit, 0-10v 0-20mA, 4-20mA	2: 10-bit, 0-10v 0-20mA, 4-20mA
Outputs			
Digital		8 relay	8 pnp
High-Speed Outputs/PWM		None	Outputs 0 to 6 can be used as PWM outputs 0.5 kHz
Analog		None	
I/O Expansion		Remote I/Os via CANbus	
Program			
Application Memory	SM35	Application Logic: 112kb • Images: 1 MB • Fonts: 512 k	
	SM43	Application Logic: 112kb • Images: 2 MB • Fonts: 512 k	
	New SM70	Application Logic: 112kb • Images: 5 MB • Fonts: 512 k	
Scan Time		15µS per 1K of typical application	
Memory Operands		512 coils, 256 registers, 32 long integers (32-bit), 32 double words (32-bit unsigned), 24 floats, 32 timers (32-bit), 16 counters. Additional non-retainable operands: 64 X-bits, 32 X-integers, 16 X-long integers, 16 X-double words	
Data Tables		32K dynamic RAM data (recipe parameters, datalogs, etc.), up to 16K fixed data	
SD Card		None	
Enhanced Features		Trends: graph any value and display on HMI • String Library: instantly switch HMI language	
Operator Panel			
Type & Colors		TFT LCD • 65,536 colors • 16 bit resolution • Brightness - Adjustable via touchscreen or software	
Display	SM35	Resolution: 320 x 240 pixels • Size: 3.5" (QVGA)	
	SM43	Resolution: 480 x 272 pixels • Size: 4.3"	
	New SM70	Resolution: 800 x 480 pixels • Size: 7"	
Touchscreen		Resistive, Analog	
Keys		Displays virtual keyboard when the application requires data entry	
General			
Power Supply		24VDC	
Battery		7 years typical at 25°C, battery back-up for RTC and system data, including variable data	
Clock		Real-time clock functions (date and time)	
Environment		NEMA4X/IP66/IP65 (when panel mounted)	
Standard		CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics	

¹ When selecting NPN for the digital inputs, the 2 Analog inputs cannot be used.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

An All-in-One that is as affordable as a „smart relay” - full-function PLC combined with a textual HMI and keyboard, with up to 40 onboard I/Os.

Meet the New Jazz 2 series Advantages:

- Faster performance - 30x faster
- Double the memory
- Built-in mini-USB programming port
- Ethernet via Add-on Port
- Fully compatible with current Jazz projects

Features:

HMI

- Up to 60 user-designed screens
- Multilingual: supports over 15 languages and 20 graphic symbols

PLC

- Ladder Logic programming ensures functional flexibility
- Functions include: interrupt, loops, math, store & compare functions
- Date & Time-based control
- High-speed counters & PWM outputs
- Direct temperature inputs
- Auto-tune PID, up to 4 loops

Communication

- SMS messaging via GSM
- Remote Access utilities
- PC access via MODBUS or OPC server
- Supports MODBUS protocol



Jazz®-J
Flat Panel



Jazz®
Classic Panel

“The Unitronics PLC provided the perfect solution for our need for control. Whether it was safety, mechanical or functionality, the Jazz had it all.”



Peter Spano,
President of GTS

Article Number	Classic Panel Flat Panel	JZ20						JZ10		
		JZ20-R10	JZ20-R16	JZ20-R31	JZ20-T10	JZ20-T18	JZ20-T40	JZ10-11-UN20	JZ10-11-UA24	JZ10-11-PT15
		JZ20-J-R10	JZ20-J-R16	JZ20-J-R31	JZ20-J-T10	JZ20-J-T18	JZ20-J-T40	JZ10-J-UN20	JZ10-J-UA24	JZ10-J-PT15
		6 Digital Inputs 4 Relay Outputs	6 Digital, 2 D/A, 2 Analog Inputs ¹ 6 Relay Outputs	16 Digital, 2 D/A, 2 Analog Inputs ¹ 11 Relay Outputs	6 Digital Inputs 4 Transistor Outputs	6 Digital, 2 D/A, 2 Analog Inputs ¹ 8 Transistor Outputs	16 Digital, 2 D/A, 2 Analog Inputs ¹ 20 Transistor Outputs	9 Digital, 2 D/A 1 Analog 1 PT100/TC Inputs ¹ 5 Relay 2 Transistor Outputs	9 Digital, 2 D/A 2 Analog, 2 PT100/TC Inputs ¹ 5 Relay, 2 Analog 2 Transistor Outputs	3 Digital, 3 D/A 3 PT1000/NI1000 Inputs ¹ 5 Relay 1 Transistor Outputs
Inputs										
Digital pnp/npn		6	8	18	6	8	18	11	11	6
High-Speed Counters ⁴		2 10kHz, 16-bit						1 5kHz, 16-bit		
Analog		None	2 10 or 12-bit, 0-10V & 2 10-bit 0-20mA, 4-20mA	2 10 or 12-bit, 0-10V & 2 10-bit 0-20mA, 4-20mA	None	2 10-bit, 0-10V & 2 10-bit 0-20mA, 4-20mA	2 10-bit, 0-10V & 2 10-bit 0-20mA, 4-20mA	2 10-bit, 0-10V & 1 10-bit 0-20mA, 4-20mA	2 10-bit, 0-10V & 2 10-bit 0-20mA, 4-20mA	3 10-bit 0-10V ²
Temperature Measurement		None	None	None	None	None	None	1 PT100/TC	2 PT100/TC	3 PT1000/NI1000
Outputs										
Digital		6 relay	6 relay	11 relay	4 npn	8 npn	20 npn	5 relay, 2 pnp	5 relay, 2 pnp	5 relay 1 pnp/npn
High-Speed Outputs/ PWM		None	None	None	2 PWM	2 PWM	2 PWM	2 PWM	2 PWM	1 HSO
Analog		None	None	None	None	None	None	None	2 12-bit +/- 10V, 4-20mA	None
Program										
Ladder Code Memory		48K						24K		
Memory Operands		256 coils, 256 registers, 64 timers								
Operator Panel										
Type		STN LCD								
Display		2 lines x 16 characters								
Touchscreen		16 keys, 10 of which may be user-labeled								
General										
Power Supply		24VDC								
Battery		10 years typical at 25°C, battery back-up for RTC and system data, including variable data								
Clock		Real-time clock functions (date and time)								
Environment		NEMA4X/IP65 (when panel mounted)								
Standard		CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics								
Programming Port		On Board Mini USB						Article No.: JZ-PRG sold separately		
Communication										
Serial		RS232/RS485 Add-on port (isolated) Article No.: JZ-RS4 sold separately								
Ethernet		Ethernet add-on port Article No.: MJ20-ET1 sold separately						Not supported		

¹ These models comprise a total of 10/20 inputs (model-dependent). 6/16 (model-dependent) of these may be wired, in a group, as either digital npn or pnp. 2 inputs have added functionality. Both may be wired in a group as npn, pnp, or analog (voltage) inputs. Note that it is also possible to individually wire 1 input as a pnp input, and the other as an analog input. The two remaining inputs are analog (current).

² In order to download applications and enable communications, install Jazz[®] with the appropriate Add-on Module.

³ Certain inputs can function as high-speed counters, or as normal digital inputs.

Add-on modules and accessories²

New!

COM Port kit	Ethernet Communication Port	Program Cloner module	Keypad Slide kit
RS232/RS485 Add-on port (isolated) Article No.: JZ-RS4	Ethernet add on port Supported by Jazz[®] 2 series only Article No.: MJ20-ET1*	Copy applications from PLC to PLC Article No.: MJ20-MEM1	Customize the Jazz [®] keypad to your application Article No.: MJ20-JZ-SL1

* Not yet UL certified

M91™

An affordable All-in-One: a smart PLC with a textual HMI and keyboard, plus an onboard I/O configuration; expand up to 150 I/Os.

Features:

HMI

- Up to 80 user-designed screens
- Multilingual: supports over 15 languages and 20 graphic symbols
- Scroll between pre-programmed recipes/menus
- Memory and communication monitoring via HMI - No PC needed

PLC

- Shaft-encoder inputs and PWM outputs
- Direct temperature inputs
- Auto-tune PID, up to 4 loops
- Date & Time-based control
- Database
- Print utilities
- Full source upload

Communication

- SMS messaging via GSM
- Remote access utilities
- PC access via MODBUS or OPC server
- Supports MODBUS protocol
- CANBus (in C models only)
- User-defined ASCII strings, enable communication with external devices
- RS232/RS485 built-in port



M91

M91										
Article Number	M91-2-R1	M91-2-R2C	M91-2-R6C	M91-2-R34	M91-2-T1	M91-2-T38	M91-2-T2C	M91-2-UN2	M91-2-UA2	M91-2-RA22
	10 Digital 1 Analog Inputs 6 Relay Outputs	10 Digital 2 Analog Inputs 6 Relay Outputs	6 Digital 6 Analog Inputs 6 Relay Outputs	20 Digital 2 D/A ¹ Inputs 12 Relay Outputs	12 Digital Inputs 12 Transistor Outputs	22 Digital Inputs 16 Transistor Outputs	10 Digital 2 D/A ¹ Inputs 12 Transistor Outputs	10 Digital 2 D/A/PT100/ TC ¹ Inputs 12 Transistor Outputs	10 Digital 2 D/A/TC ¹ Inputs 10 Transistor 2 Analog Outputs	8 Digital, 2 D/A 2 PT100/TC/ Digital ¹ Inputs 8 Relay 2 Analog Outputs
Inputs										
Digital pnp/npn	10	10	6	22	12	22	12	12	12	12
HSC/Shaft-Encoder/ Max. Freq. Measurer ²	3 10kHz 16-bit	3 10kHz 16-bit	1 10kHz 16-bit	3 30kHz ³ 16-bit	2 10kHz 16-bit	2 30kHz ³ 16-bit	3 10kHz 16-bit	2 10kHz 16-bit	1 30kHz ³ 16-bit	1 30kHz ³ 16-bit
Analog	1 10-bit, 0-10V 0-20mA 4-20mA	2 10-bit, 0-10V 0-20mA 4-20mA	6 10-bit 2 0-10V 0-20mA, 4-20mA and 4 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	None	None	2 10-bit 0-10V, 0-20mA 4-20mA	2 14-bit 0-10V, 0-20mA 4-20mA, PT100/TC	2 14-bit 0-10V, 0-20mA 4-20mA, TC	2 14-bit 0-10V, 0-20mA 4-20mA
Temperature Measurement	None	None	None	None	None	None	None	None	None	2 PT100/TC
Outputs										
Digital	6 relay	6 relay	6 relay	12 relay	12 pnp	16 pnp	12 pnp	12 pnp	10 pnp	8 relay
High-Speed Outputs/ PWM ⁴	None	None	None	None	2, first 2 outputs can function as HSO, 0.5kHz maximum					None
Analog	None	None	None	None	None	None	None	None	2 12-bit: 0-10V, 4-20mA	2 12-bit: 0-10V, 4-20mA
I/O Expansion										
I/Os may be added via expansion port. Expand up to 150 I/Os										
Program										
Application Memory	36K (virtual) Ladder code capacity									
Memory Operands	256 coils, 256 registers, 64 timers									
Database	1024 integers, (indirect access)									
Operator Panel										
Type	STN LCD									
Display Size	2 lines x 16 characters									
Keys	15 keys									
General										
Power Supply	12/24VDC	12/24VDC	24VDC	24VDC	12/24VDC	24VDC	12/24VDC	12/24VDC	24VDC	24VDC
Battery	7 years typical at 25°C, battery back-up for all memory sections and RTC									
Clock (RTC)	Real-time clock functions (date and time)									
Environment	IP65/NEMA4X (when panel mounted)									
Standard	CE, UL Many of our products are also UL Class 1 Div 2 and GOST certified - please contact Unitronics									

¹ In these models certain inputs are adaptable, and can function as either digital, analog, and in certain models also as thermocouple or PT100. Using adaptable inputs reduces the amount of free digital inputs. For example, M91-2-UA2 offers 12 digital inputs. Implementing 2 TC inputs requires 4 digital inputs, leaving 8 free.

² Certain inputs can function as high-speed counters, shaft-encoder inputs, or normal digital inputs.

³ This specification depends on cable length.

⁴ Certain outputs can function as high-speed or PWM outputs.

* Additional models (M90 models) are listed on the Unitronics web site.

I/O Expansion Modules

Expand your system with local or remote I/O expansion modules.

Vision series support both local & remote I/O modules. M91 supports local modules only.

Digital Modules

IO-DI8-T08	IO-DI8-R04	IO-DI8-R08	EX90-DI8-R08³	IO-DI16
24VDC* 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 pnp Transistor Outputs	24VDC* 8 Digital Inputs, pnp/npn, including one High-speed Counter 4 Relay Outputs	24VDC* 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 Relay Outputs	24VDC 8 Digital Inputs, pnp/npn, including one High-speed Counter 8 Relay Outputs	24VDC* 16 Digital Inputs, pnp/npn, including one High-speed Counter
IO-T016	IO-R08	IO-R016	IO-DI8ACH	
24VDC 16 pnp Transistor Outputs	24VDC* (power supply) 8 Relay Outputs	24VDC* (power supply) 16 Relay Outputs	110/220 VAC 8 AC Inputs	

*Also available as 12VDC – contact us for part number

High-speed Remote I/O Module

EXF-RC15^{2,5}
24VDC 9 Digital Inputs pnp/npn, including 3 high-speed counter, 4 npn Transistor Outputs, may function as high-speed PWM/PTO, 2 relay outputs

Analog, Temperature and Weight/Strain Measurements

IO-AI4-A02	IO-PT400	IO-PT4K	
24VDC (power supply) 4 Analog Inputs 12-bit, 0-10V, 0-20mA, 4-20mA, 2 Analog Outputs, 12-bit+sign, ±10V, 0-20mA, 4-20mA	4 PT100/NI100/NI120 Inputs Range PT100: -50°C ÷ 460°C (-58°F ÷ 860°F) Range NI100: -50°C ÷ 232°C (-58°F ÷ 449°F) Range NI120: -50°C ÷ 172°C (-58°F ÷ 341°F) 12-bit	4 PT1000/NI1000 Inputs Range PT1000: -50°C ÷ 460°C (-58°F ÷ 860°F) Range NI1000: -50°C ÷ 232°C (-58°F ÷ 449°F) 12-bit	
IO-A06X	IO-LC1⁴ IO-LC3⁴	IO-ATC8	IO-AI8
24VDC (power supply) 6 Isolated Analog Outputs 0-10V, 0-20mA, 4-20mA 12-bit	12/24VDC (Power Supply) 1-3 Loadcell/Strain gauge Inputs Input voltage ranges: ± 20mV, ± 80mV Excitation: AC/DC 1 Digital pnp Input 2 pnp Outputs Not supported by all PLCs	8 Thermocouple/Analog Inputs T/C J, K, T, B, E, N, R, S, 0.1° Resolution, 0-10V, 0-20mA, 4-20mA, 12/14-bit	8 Analog Inputs 0-10V / 0 ÷ 20mA 14-bit 0-10V, 0-20mA, 4-20mA 12/14-bit

I/O Expansion Module Adapters

EX-A2X¹
Local I/O module adapter. Galvanic isolation. Up to 8 modules may be connected to a single PLC1. Supports both 12/24 VDC
EX-RC1^{1,5}
Remote I/O module adapter, via CANbus. Connect multiple adapters to a single PLC; connect up to 8 modules per adapter. Supports both 12/24 VDC.

¹ Number of supported I/Os & I/O modules varies according to PLC model.

² The EXF-RC15 functions as a CANbus node in a Vision UniCAN network. The EXF-RC15 is stand-alone and does not support I/O Expansion Modules.

³ The EX90 is housed in an open casing. Only one EX90 can be connected per PLC, as a single expansion module; Expansion adapter not required.

⁴ IO-LCx models are supported by the M91 & Vision series. Not supported by the M90 series.

⁵ Supported by Vision series. Not supported by M91 series.

XL Digital/Analog Modules

Functions as both I/O module and adapter*			
IO-D16A3-R016	IO-D16A3-T016	EX-D16A3-R08	EX-D16A3-T016
24VDC, 16 Digital Inputs pnp/npn, including two High-speed Counters, 3 Analog Inputs, 10-bit, 0-20mA, 4-20mA, 16 Relay Outputs	24VDC, 16 Digital Inputs pnp/npn, including one High-speed Counter, 3 Analog Inputs, 10-bit, 0-20mA, 4-20mA, 15 pnp + 1 pnp/npn Transistor Outputs including 1 HSO	24VDC, built-in Expansion Module Adapter, 16 Digital Inputs, pnp/npn, including two High-speed Counters, 3 Analog Inputs 10-bit, 0-20mA, 4-20mA, 8 Relay Outputs	24VDC, built-in Expansion Module Adapter, 16 Digital Inputs, pnp/npn, including one High-speed Counter, 3 Analog Inputs 10-bit, 0-20mA, 4-20mA, 15 pnp + 1 pnp/npn Transistor Outputs including 1 HSO

* Functions as local adapter. Can support up to 7 I/O modules

Snap-in I/O Modules



Plug a Snap-in module directly into the back of a Vision PLC.
Compatible with all V200, V500, V1040 and V1210 Vision series models.

Article No.	V200-18-E1B	V200-18-E2B	V200-18-E3XB	V200-18-E4XB	V200-18-E5B	V200-18-E6B	V200-18-E46B ¹	V200-18-E62B ¹
Digital Inputs (isolated)	16 npn/pnp (including 2 Shaft-encoder inputs)	16 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	18 npn/pnp (including 2 Shaft-encoder inputs)	30 npn/pnp (including 2 Shaft-encoder inputs)
Analog Inputs	3 10-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA	4 isolated 12-14-bit (software dependent) 0-10V, 0-20mA 4-20mA and/or TC/PT100	4 isolated 12-14-bit (software dependent) 0-10V, 0-20mA 4-20mA and/or TC/PT100	3 10-bit 0-10V, 0-20mA 4-20mA	3 10-bit 0-10V, 0-20mA 4-20mA & 2 14-bit 0-10V, 0-20mA 4-20mA and/or TC/PT100	9 3 10-bit, 0-10V 0-20mA, 4-20mA 6 14-bit 0-10V, 0-20mA 4-20mA	2 10-bit 0-10V, 0-20mA 4-20mA
Temperature Measurement	None	None			None		None	None
Digital Outputs (isolated)	4 npn/pnp (including 2 High-speed outputs)	4 npn/pnp (including 2 High-speed outputs)	2 npn/pnp High-speed	15 npn 2 npn/pnp (including 2 High-speed)	15 npn 2 npn/pnp (including 2 High-speed)	2 npn/pnp High-speed	2 (including 2 High-speed)	28 npn 2 npn/pnp High-speed
Relay Outputs (isolated)	10	10	15	None	None	15	15	None
Analog Outputs	None	2 12-bit 0-10V, 0-20mA 4-20mA	4 12-bit 0-10V, 4-20mA isolated	4 12-bit 0-10V, 4-20mA isolated	None	2 12-bit 0-10V, 4-20mA isolated	2 12-bit 0-10V, 4-20mA isolated	None

¹V200-18-E46B, V200-18-E62B are not yet UL certified

Additional COM Modules

Enhance Vision's communication capabilities¹

Vision Model	Ethernet	RS232/RS485	Isolated RS232/RS485	CANbus	Profibus
SAMBA	V100-17-ET2	V100-17-RS4	V100-17-RS4X	V100-17-CAN	None
V130, V350, V430	V100-17-ET2 V100-S-ET2 ²	V100-17-RS4	V100-17-RS4X	V100-17-CAN V100-S-CAN ²	V100-17-PB1
V200, V500, V700, V1040, V1210	V200-19-ET2	V200-19-RS4	V200-19-RS4-X	None	V100-17-PB1 ³

GSM-KIT-41J
Kit Including Enfora GSM1318 Q. Band Modem

GSM-KIT-16J
KIT, MODEM GPRS, CINTERION, BGS2T

GSM-KIT-17J-3G
KIT, MODEM GPRS, CINTERION, EHS6T

DIN-rail Power Supplies

UAP-24V24W	UAP-24V60W	UAP-24V96W
24W 24V 1A	60W 24V 2.5A	96W 24V 4A

¹ V200/V500/V1040/V1210: 1 optional port for serial or Ethernet
V130/V350: 1 optional port for serial or Ethernet & 1 optional port for CANbus/Profibus

² Extended temperature cards, operational temperature : -30°C to 60°C

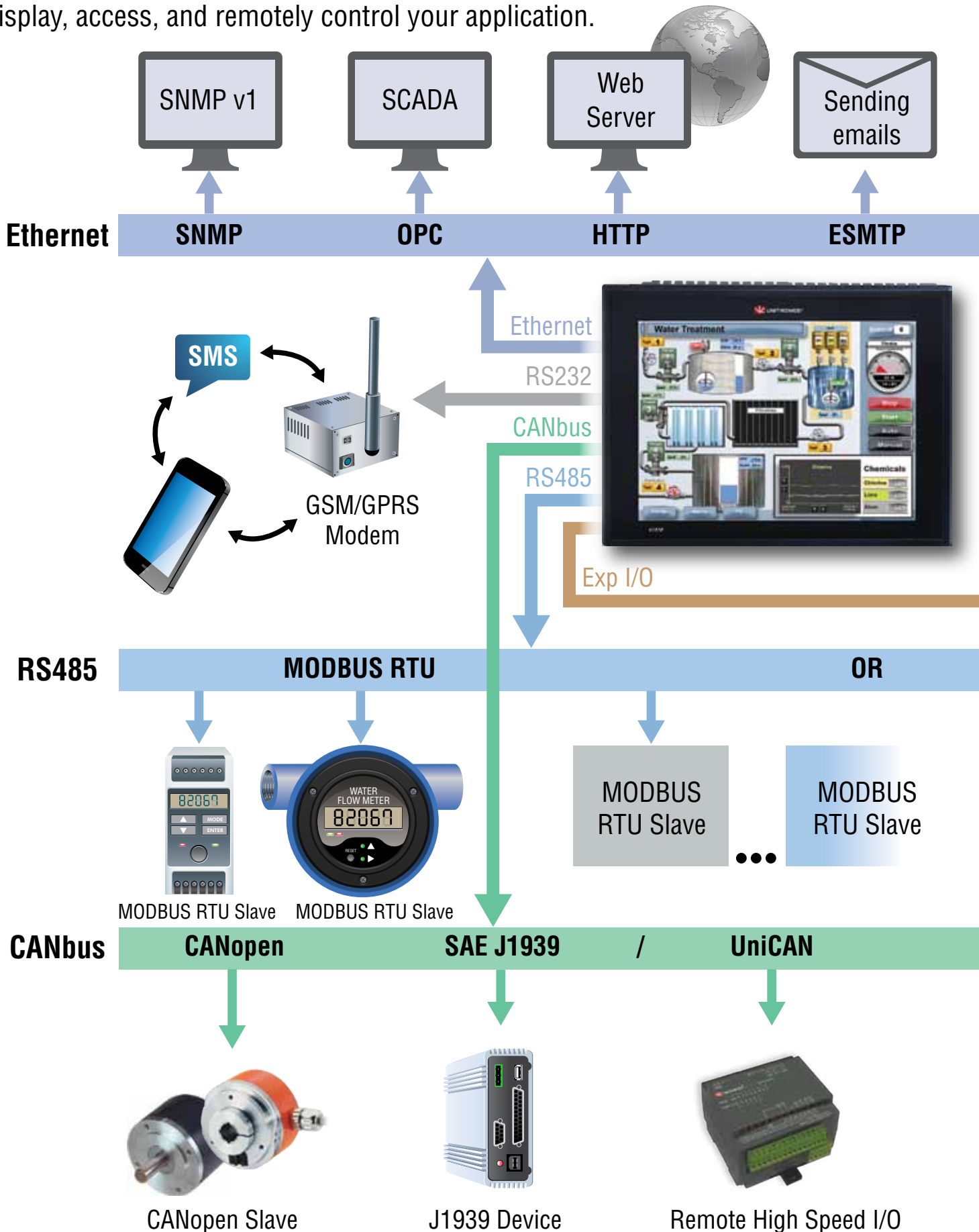
³ Only for V700



Configure your Network

Collect & communicate data.

Display, access, and remotely control your application.



This image is for illustrative purposes only. Features and capabilities vary according to model.

-  **Argentina:**
AEA SACIF
Tel: 11 457 41 555, Fax: 11 457 42 400
servicioalcliente@aea.com.ar, www.aea.com.ar
-  **Australia:**
Micromax Specialists in Automation
Tel: 1300 36 26 26, Fax: 1300 01 71 00
info@micromaxsa.com.au, www.micromaxsa.com.au
-  **Austria:**
Schmachtl GmbH
Tel: 0732/7646-0, Fax: 0732/7-646-704
office@schmachtl.at, www.schmachtl.at
-  **Belarus:**
Klinkmann Belarus
Tel: 17 2000876, Fax: 17 2272082
minsk@klinkmann.com, www.klinkmann.com
-  **Belgium:**
Isotron Systems BVBA
Tel: 034 507 045, Fax: 034 507 046
info@isotron.eu, www.isotron.eu
-  **Bosnia and Herzegovina:**
Tipteh d.o.o. Beograd
Tel: 381 11 30 18 326, Fax: 381 11 31 31 057
damir.vecerka@tipteh.rs, www.tipteh.rs
-  **Brazil:**
DAKOL Instrumentos e Sistemas Ltda.
Tel: (11) 3231 4544, Fax: (11) 3231 4544
vendas@dakol.com.br, www.dakol.com.br
-  **Bulgaria:**
Semo Ltd.
Tel: 2 942 4754, Fax: 2 942 4762
engineering@semo.bg, www.semo.bg
-  **Canada:**
Unitronics, Inc.
Toll free: 866 666 6033
Tel: 617 657 6596, Fax: 617 657 6598
usa.sales@unitronics.com, www.unitronics.com
-  **Chile:**
Schädler Sick SpA
Tel: (2) 274 7430, Fax: (2) 204 9338
info@schadler.com, www.schadler.com
-  **China:**
Beijing Ample Thrive CO, Ltd.
Tel: 010-88177186, 010-88177187
sales@a082.com, www.a082.com
-  **Colombia:**
COLSEIN Ltda.
Tel: 1-519 0967, Fax: 1-519 0967 Ext. 101
info@colsein.com.co, www.colsein.com.co
-  **Croatia:**
Tipteh d.o.o. (Slovenia)
Tel: 013 816 574, Fax: 013 816 577
tipteh@tipteh.hr, www.tipteh.si
-  **Cyprus:**
Anaxagoras Pneumatics Ltd.
Tel: 022 442 200, Fax: 022 495 953
sales@anaxagoras.eu, www.anaxagoras.eu
-  **Czech Republic:**
Schmachtl CZ, spol. s r.o.
Tel: 244 001 559, Fax: 244 910 700
unitronics@schmachtl.cz, www.schmachtl.cz
-  **Denmark:**
Desim Elektronik ApS
Tel: 70 22 00 66, Fax: 70 22 22 20
desim@desim.dk, www.desim.dk
-  **Ecuador:**
Local Ecuadorian distributors: contact Unitronics Ltd.
Tel (Israel): +972 3 9778893 / 5, Fax: +972 3 9778877
export@unitronics.com, www.unitronics.com
-  **Estonia:**
Klinkmann Eesti AS
Tel: 6 684 500, Fax: 6 684 501
klinkmann.est@klinkmann.ee, www.klinkmann.com
-  **Finland:**
Klinkmann Automation Oy
Tel: 9 540 49 40, Fax: 9 541 35 41
automation@klinkmann.fi, www.klinkmann.com
-  **France:**
PL Systems
Tel: 016 092 4171, Fax: 016 928 4193
info@pl-systems.fr, www.pl-systems.fr
-  **Germany:**
Spectra GmbH & Co. KG.
Tel: 0 71 21/ 143 21-0, Fax: 0 71 21/ 143 21-90
spectra@spectra.de, www.spectra.de
-  **Greece:**
Automation & Power Control Ltd.
Tel: 210 531 3111, Fax: 210 598 1435
info@apc.com.gr, www.apc.com.gr
-  **Hong Kong:**
Automate Control Engineering Ltd.
Tel: 02 342 72 76, Fax: 02 342 72 29
ace@automate.corp.com.hk, www.automate-ace.com
-  **Honduras:**
Electrical Dealer
Tel: 558 1400, Fax: 557 9709
info@electrical-dealer.com, www.electrical-dealer.com
-  **Hungary:**
Kvalix Automatika Kft.
Tel: 1 272 2242, Fax: 1 272 2244
info@kvalix.hu, www.kvalix.hu
-  **Iceland:**
Samey ehf
Tel: 510 5200, Fax: 510 5200
Sala@samey.is, www.samey.is
-  **India:**
Rajdeep Automation Pvt Ltd.
Tel: 020-243 937 55, Fax: 020 243 937 56
sales@rajdeep.in / info@rajdeep.in, www.rajdeep.in
-  **Ireland:**
Local distributors: contact Unitronics Ltd.
Tel (Israel): +972 3 9778893 / 5, Fax: +972 3 9778877
export@unitronics.com, www.unitronics.com
-  **Israel:**
Zivan Instruments Co. Ltd.
Tel: 04 872 98 22, Fax: 04 872 66 27
info@zivan.co.il, www.zivan.co.il
-  **Italy:**
TELESTAR s.r.l.
Tel: +39 0321 966 768, Fax: +39 0321 996 281
telestara@telestara-automation.it, www.telestara-automation.it
-  **Latvia:**
Klinkmann Lat Ltd.
Tel: 6738 16 17, Fax: 6738 24 51
klinkmann@klinkmann.lv, www.klinkman.com
-  **Lithuania:**
UAB Klinkmann Lit
Tel: 5 216 1646, Fax: 5 216 2641
post@klinkmann.lt, www.klinkmann.com
-  **Macedonia:**
Tipteh d.o.o Skopje
Tel: 070 399 474, Fax: 023 174 197
tipteh@on.net.mk, www.tipteh.si
-  **Malaysia:**
Yewtech SDN BHD
Tel: 168 761 575, Fax: 856 112 99
sales@yewtech.com, www.yewtech.com
-  **Malta:**
RAYAIR Automation Limited
Tel: 2 16 724 97, Fax: 21 8 051 81
Info@rayair-automation.com
sales@rayair-automation.com, www.rayair-automation.com
-  **Mexico:**
Sistemas de Control Autec, S.A. de C.V.
Tel: 55 527 885 19, Fax: 55 527 885 32
-  **The Netherlands:**
Isotron Systems BV
Tel: 073 639 1639, Fax: 073 639 1699
info@isotron.nl, www.isotron.nl
-  **New Zealand:**
EMC Industrial Group Ltd.
Tel: 9 415 5110, Fax: 9 415 51 15
sales@emc.co.nz, www.emc.co.nz
-  **Nigeria:**
Technosuite Limited
Tel: 1 804 0237, Fax: 1 271 6985
enquiries@technosuiteitd.com, www.technosuiteitd.com
-  **Norway:**
Tormatic as
Tel: 33 16 50 20, Fax: 33 16 50 45
info@tormatic.no, www.tormatic.no
-  **Peru:**
EPLI SAC
Tel: 330 1595, Fax: 431 1492
info@epli.com.pe, www.epli.com.pe
-  **Philippines:**
Cosine Industries INC
Tel: 2 350 74 48, Fax: 2 412 73 21
sales@cosine.net.ph, www.cosine.net.ph
-  **Poland:**
Elmark Automatyka Sp. zo.o.
Tel: 22 541 84 60, Fax: 22 541 84 61
elmark@elmark.com.pl, www.elmark.com.pl
-  **Portugal:**
Tecnilab Portugal, SA
Tel: 21 722 08 70, Fax: 21 726 45 50
geral@tecnilab.pt, www.tecnilab.pt
-  **Romania:**
Local Romanian distributors: contact Unitronics Ltd.
Tel (Israel): +972 3 9778893 / 5, Fax: +972 3 9778877
export@unitronics.com, www.unitronics.com
-  **Russia:**
ZAO Klinkmann Spb
St.Petersburg
Tel: 812 327 37 52/26, Fax: 812 327 37 53
klinkmann@klinkmann.spb.ru, www.klinkmann.com
Moscow branch
Tel: 495 641 1616, Fax: 495 641 3434
moscow@klinkmann.spb.ru, www.klinkman.com
Yekaterinburg branch
Tel: 343 287 19 19, Fax: 343 287 19 19
yekaterinburg@klinkmann.spb.ru, www.klinkman.com
Samara branch
Tel: 846 273 95 85, Fax: 846 273 95 85
samara@klinkmann.spb.ru, www.klinkman.com
-  **Serbia:**
Tipteh d.o.o. Beograd
Tel: 381 11 30 18 326, Fax: 381 11 31 31 057
damir.vecerka@tipteh.rs, www.tipteh.rs
-  **Singapore:**
YT AUTOMATION SINGAPORE PTE LTD
Tel: 66840702, Fax: 66840703
ytautomation@singnet.com.sg, www.ytautomation.com
-  **Slovakia:**
S.D.A. s.r.o
Tel: 48 472 34 11, Fax: 48 472 34 69
sekretariat@s-d-a.sk, www.s-d-a.sk
-  **Slovenia:**
Tipteh d.o.o.
Tel: 012 005 150, Fax: 012 005 151
info@tipteh.si, www.tipteh.si
-  **South Africa:**
Vision Automation
Tel: 011 826 7365, Fax: 011 826 7361
info@visionautomation.co.za, www.unitronics.co.za
-  **Spain:**
SIDE, SA
Tel: 93 846 4801, Fax: 93 849 1394
info@side.es, www.side-automatizacion.com
-  **Sweden:**
Sensorgruppen AB
Tel: 040 933030 and Fax: 040 933010
info@sensorgruppen.se, www.sensorgruppen.se
-  **Switzerland:**
COMAT AG Industrielle Elektronik
Tel: (0) 31 838 55 77, Fax: (0) 31 838 55 99
info@comat.ch, www.comat.ch
-  **Taiwan:**
MARK Automation Tek. Inc.
Tel: 02-25700992, Fax: 02-25700816
products@marktech.com.tw, www.marktech.com.tw
-  **Thailand:**
Themtech Company Ltd.
Tel: (2) 693 66 29, Fax: (2) 693-66 30
sales@themtech.co.th, www.themtech.co.th
-  **Turkey:**
YORUM OTOMASYON MALZEMELERİ SAN. VE TIC. A.Ş
Tel: 216 364 69 69, Fax: 216 364 69 75
yorum@yorum-automation.com, www.yorum-automation.com
-  **Ukraine:**
Klinkmann Ukraine LLC
Tel: 44 495 33 40, Fax: 44 495 33 41
klinkmann.kiev@klinkmann.kiev.ua, www.klinkmann.com
-  **United Kingdom:**
Local UK distributors: contact Unitronics Ltd.
Tel (Israel): +972 3 977 88 94, Fax: +972 3 977 88 77
export@unitronics.com, www.unitronics.com
-  **USA:** Unitronics Inc.
Toll free: 866 666 6033
Tel: 617 657 6596, Fax: 617 657 6598
usa.sales@unitronics.com, www.unitronics.com
-  **Venezuela:**
Intrave, C.A
Tel: 0212 953 5080, Fax: 0212 951 2521
ventas@intrave.com, www.intrave.com
-  **Vietnam:**
ANS
Tel: 8 3517 0401 Ext:17, Fax: 8 3517 0403
sales.ans@ansvietnam.com, www.ansvietnam.com



International Headquarters: P.O.B. 300, Ben Gurion Airport 7019000, Israel
Tel: +972 3 977 88 88, Fax: +972 3 977 88 77, global.sales@unitronics.com