



INPUTS & OUTPUTS

Maximum I/O points	1008
Backplanes	Up to 4 x 2, 4, 6 or 12 slots plus 4 x 4 slots per RTU
I/O configuration	Automatic/manual
Backplane sizes	2 / 4 / 6 / 12 slots
Removable I/O connectors	Yes, with locking screw for security
Digital modules	Max. 16 inputs or 16 outputs/module
Analog modules	Max. 8 inputs or 4 outputs/module

PROCESS CONTROL UNIT	CP-12	CP-35
CPU	40MHz x86	1GHz ARM9
Memory	512kB	256MB (512MB ECC)
FLASH RAM	512kB	2GB eMMC (expandable)
micro SD Card	No	up to 32GB
Clone System to SD Card	No	Automatic Cloning
Battery Backup	>7 years	>20 years
Event logging	20,000	100,000 events (up to 10 DNP3 masters)
Configuration Software	Toolbox32	ToolboxPlus
Programming Languages	Ladder Logic	IEC61131-3, All 5 languages, with user defined function blocks
Send config via serial cable	Yes	Yes
Send config via Ethernet	Yes	Yes
Send config remotely	Yes	Yes
Load config from USB Stick	No	Yes
Update Firmware from USB	No	Yes
Save Diagnostics to USB	No	Yes
Password Protected Menu System	No	On CPU via OLED Display
Configs stored in FLASH	1	4 + Factory default
Firmware stored in FLASH	1	4 + Factory default
Security	Port security	Role based access, IP white listing, secure webserver, selective lockdown of features, Audit log
Protocols	Available as drivers at no extra cost	Available with standard firmware at no extra cost

COMMUNICATIONS SUPPORTED

Total Ports / RTU	CP-12: up to 16	CP-35: over 20
Master/slave	Yes	
Peer-to-peer	Yes	
Redundant/Fallback pathways	Yes	
Protocols	Serial and IP versions of Modbus, DNP3Sav5 and Kingfisher; IEC60870-5-101 & 104, SNMP, HTTP, HTTPS and SSH with more available on request	

OPTION CARDS

CP-12 and MC-12	1 x RS232/RS485 serial port, 2 x option card slots
CP-35 and MC-35	2 x RS232/RS485 serial ports, 1 x USB, 1 x Ethernet, 2 x option card slots
MC-31	1 x Ethernet port, 2 x option card slots
Available option cards	A4 - Ethernet fibre T4 - Copper Ethernet H - HART interface I - Serial copper I2 - Dual serial copper L - Private line

DIAGNOSTICS

Pre-programmed	Yes
I/O modules	LEDs (and via CP-35 OLED)
CPU modules	CP12: LED CP-35: OLED
Power supply modules	LEDs (and via CP-35 OLED)
Report via network	Yes
Software	Yes
Communications analyser	Yes
Service Report	Yes

POWER

AC supply	100 to 240 VAC
DC supply	20 to 60 VDC or 96 to 300 VDC
Solar supply	10.5-16.0 VDC
Power down modes	Yes
Battery backup	Yes
Battery size	Various
Battery charging option	Yes, with Thermal compensation

ENVIRONMENTAL

Operational temperature	-40° to 85°C (see hardware manual for exceptions)
Storage temperature	-40° to 85°C
Humidity	5% to 98% RH non-condensing

REDUNDANCY LEVELS

CPU's/RTU	2
Power supplies/rack	2