

User Interface	
Display	7" High Resolution Full Colour Graphics Display 800x480 Anti-Glare
Programming	Touch Screen or Remote Keypad via USB Port
Operating System	Windows CE (licence included)
Physical	
Dimensions (mm)	234(H)x264(W)x142(D)
Ratings	IP65/DIN VDE 60529 NEMA 12
Approvals	ABS Lid UL94 HB/1.6 Polyamide base UL94 VO/1
Mounting	4 Fixed holes Optional: Wall Brackets or DIN Rail Holder
Weight	2.5Kg
Outputs & Communications	
Analogue	3 x 4-20mA inputs & 2 Isolated Outputs - User Programmable (0.1% resolution) Optional isolation on inputs - factory build
Digital 1	1 x Ethernet RJ45
Digital 2	2xUSB External, 1xUSB Internal
Digital 3	Modbus RS485, RTU and ASCII, Baudrate: 9600 or 19200, Parity: None, Even or Odd, Databits: 8, StopBits: 1 or 2. One RS485 used for sensor inputs and one used for BMS communications. 1x RS232 for GPRS modem.
Relays	6 user programmable SPCO rated at 10A @230VAC
Power	
Supply (AC)	Universal Power Supply 80 -240V ~ 1.2A, 30W
Supply (DC)	18V -30V (Optional)
Electronic Performance	
Processors	ARM Cortex
Internet Access	Standard through Ethernet connection Static TCP/IP address (or optional Wi-Fi)
Logger	Internal 4G SD Card.
Temperature Range	-20 to +70 °C
Features	
Intuitive Software	Simple Windows based intuitive software allows fast and reliable programming without the need for complex instruction manuals.
Echo Profiling	Real time display of Ultrasonic Echoes
Display Screens	Switch between Tabular or Graphical. User programmable screen colour choice.
Measurement Parameters Direct	Open Channel Flow (8 Primary Devices, Manning Formula and 32-point Lookup Table, Penstock Control), pH or Redox, Turbidity, DO, Conductivity, Temperature, Ammonia, Ammonium, Chloride, Calcium, Fluoride, Nitrate, Potassium.
Measurement Parameters Indirect	Other sensor inputs via scalable 4-20mA.
Control Functions	Proportional control of chemical dosing pumps. Easily performed by mapping sensor inputs such as pH/Redox to 4-20mA control of remote dosing pumps.
Logger	Up to 30 Years logging capability. Fault Log Reports. Inbuilt data logger viewer.
On-Screen Reports	Fast access to 7-day data reports on USI screen. Trend Graphs available on Screen.
Open Channel Flow Transducers	Ultrasonic TOF

Programmability	Open Channel Flow, pH, Temperature, Conductivity, DO, Turbidity. User Configurable Display for Graphical and Text Presentation, Colour Choice, 4-20mA inputs and outputs, GPRS, Relays.
Reporting Software	Inquisitor - Standalone Windows software enabling data to be downloaded to pc and reports generated as Tabular, Graphs and CSV formats.
Remote Monitoring	Remote USI software allows the USI to be viewed on a remote pc via ethernet.
Options	
Cloud Access	Data download to Smart Storms Cloud server via GPRS modem. 2 minute updates of all measured parameters and full data logger access.
Sensor Interface	Sensor Interface module – allows 4 environmental sensors to be connected directly to the USI.
Remote Communications	GPRS Modem or RF link
Isolated 4-20mA inputs	3 channel galvanically isolated 4-20mA inputs (non-isolated are standard).