

Product Data Sheet

CH4300E Series Ethernet Communications Hub

Description

The CH4300E series of communications hubs offer a convenient form factor for the rapid deployment of Ethernet based particle counting systems. Optimised for use with Pharmagraph enVigil software and MetOne 6015P particle counters, the Ethernet communications hub is designed to be located above or adjacent to the clean room. It offers rapid interfacing to particle counters with integrated pumps and provides easy expansion for Pharmagraph alarm indicators and Series 2000 I/O modules/ MX5000.

Available in versions supporting from one to eighteen particle counters in a single unit, the CH4300E includes a 24V power supply, Ethernet switches and a serial device server. The built-in MX6001 intelligent serial device server provides RS485 serial communications for alarm indicators, analog input modules for environmental monitoring. It also offers digital outputs to directly drive an alarm beacon and a digital input to read an associated mute button. The enclosure accommodates up to eight Pharmagraph Series 2000 I/O modules, offering up to 64 4-20mA inputs or 48 4-wire Pt100 inputs in any mix of modules. Alternatively, it accommodates a single Pharmagraph MX5000 I/O rack offering up to 84 4-20mA inputs or 42 4-wire Pt100 inputs in any mix.

The CH4300E is designed to be anchored to the wall using M8 bolts.



CH4300E Specification

- Powder coated steel enclosure
Width 500mm
Depth 300mm
Height 700mm
Weight <30kg
- Electrical requirements
110/230Vac 2A max
- Environmental
Operating temperature 0 to 50 °C
Storage temperature -20 to 60°C
- Communications
Ethernet in from host PC
Ethernet via CAT5 cable to each 6015PEthernet particle counter
6 x RS485 for I/O modules or Alarm Indicators
- Digital Outputs: 24Vdc, current limited to 500mA
4 outputs to drive alarm beacon with sounder
- Digital Input: opto-isolated to 200V
1 input to act as 'Mute' for alarm sounder

Supported External Hardware

- Met-One 6015P Ethernet particle counters
- Pharmagraph AN1220 Alarm Indicator
- Pharmagraph AN1440 Alarm Message Display
- Pharmagraph WD1220 Watchdog

Supported Internal Modules

- Pharmagraph Series 2000 I/O (up to 8 modules)
- Pharmagraph Series 5000 I/O (up to 7 modules)
- GSM modem

Ordering Information

Item	Description	Country of Origin
CH4300E-06-SN	CH4300 Series Ethernet communications hub for connection up to 6 Ethernet particle counters (Met One 6015P) and up to 8 series 2000 modules. Includes MX6001 with alarm beacon drive and 24V PSU. Series 2000 modules to be purchased and installed separately.	UK
CH4300E-12-SN	CH4300 Series Ethernet communications hub for connection up to 12 Ethernet particle counters (Met One 6015P) and up to 8 series 2000 modules. Includes MX6001 with alarm beacon drive and 24V PSU. Series 2000 modules to be purchased and installed separately.	UK
CH4300E-18-SN	CH4300 Series Ethernet communications hub for connection up to 18 Ethernet particle counters (Met One 6015P) and up to 8 series 2000 modules. Includes MX6001 with alarm beacon drive and 24V PSU. Series 2000 modules to be purchased and installed separately.	UK
CH4300E-06-MN	CH4300 Series Ethernet communications hub for connection up to 6 Ethernet particle counters (Met One 6015P) and up to 7 MX5000 modules. Includes MX6001 with alarm beacon drive, 24V PSU and MX5000 8-Port back plane and MX5110 Comms Processor. MX5000 modules to be purchased and installed separately.	UK
CH4300E-12-MN	CH4300 Series Ethernet communications hub for connection up to 12 Ethernet particle counters (Met One 6015P) and up to 7 MX5000 modules. Includes MX6001 with alarm beacon drive, 24V PSU and MX5000 8-Port back plane and MX5110 Comms Processor. MX5000 modules to be purchased and installed separately.	UK
CH4300E-18-MN	CH4300 Series Ethernet communications hub for connection up to 18 Ethernet particle counters (Met One 6015P) and up to 7 MX5000 modules. Includes MX6001 with alarm beacon drive, 24V PSU and MX5000 8-Port back plane and MX5110 Comms Processor. MX5000 modules to be purchased and installed separately.	UK

Example using Series 2000: 5 Ethernet counters and 18 Pt100 inputs

