

# **Control Enclosure** Specification Sheet

The T757X series of standard enclosures comprises of one services enclosure and between one and four I/O enclosures bayed to form a single suite. Each I/O enclosure has been designed to accommodate up to ten T2550 16-way Process Automation Controllers. The pre-configured design keeps build time and implementation costs to a minimum and all active components are easily removable to facilitate maintenance.

Careful attention has been given to redundant power distribution and network to provide a high degree of fault tolerance. As an option an Eycon™ Visual Supervisor can be mounted on the front door as a local operator interface.

## I/O Terminations

Integral Terminal Units on the T2550 base provide the connection between the plant wiring and the T2550 PAC I/O modules. As there is no direct wiring to the plug in I/O modules, they can be replaced under power without any disturbance to the field wiring. Isolator links or fuses are options for certain modules.

Any required terminals can be mounted on the terminal rail provided.



# • Typical capacity is up to 512 I/O points per

- enclosure
  The services enclosure supports up to 4 I/O
- supports up to 4 1/0 enclosures
   Standard construction
- and minimum wiring reduces cost
- Floor standing
- Front and rear access option for increased packing density
- Supplied tested and documented including drawings
- Protected up to IP54
- Top and bottom cable entry

## High Integrity Power Supply System

All control units are powered by 24V dc for simplicity and safety. The 24V dc is provided by several PSUs in redundant configuration, powered from the System ac mains.

#### **Network Connections**

Internal communications between the various control nodes is via high speed Ethernet based control network.

Optional external Modbus and Profibus communications are available.

#### System Availability

High availability of the system is assured by the fundamental reliability of the control units and redundant CPU options, plus the following features built into the enclosure design:

- Redundant power supplies
- Hot swap replacement of all active components
- Extensive health monitoring and diagnostics with indicator LEDs/watchdog relays prewired
- Electrical/control segregation
  - Separate services enclosure ensures electrical distribution segregated from signal wiring
  - Easy field cable distribution and within trunking (top/bottom entry)
- Easy field signal interface
  - Optionally a range of DIN rail mounted signal conditioning modules may be fitted
- Easy expandability
  - Start with one and expand up to 4 I/O enclosures per services enclosure

#### Documentation

The enclosures are supplied with standard drawings available on disk in AutoCAD format.

#### **Customised Enclosures**

Enclosures may be customised to accommodate additional equipment or variants in wiring standards but this will require a specific detailed quotation and incur an engineering charge.

#### **Support Services**

Eurotherm Customer Services Department offers a variety of onsite support services, including verification of network wiring and assistance with commissioning.



#### Physical (version dependent)

	Services T7570	I/O Enclosure T7571
External dimensions (mm):	800W x 600D x 2000H	1000W x 600D x 2000H
Plinth - 100 (mm):	Yes	Yes
Weight (approx):	260kg	320kg
Cable entry - Top/Bottom	Yes/Yes	Yes/Yes
Door hinge - Left/Right	Left	Both
Light:	Yes	Yes
Thermostat (set at 50 degrees):	Yes	Yes
N+1 (redundant) PSU:	Yes	
Inlet fan/filter:	Yes	Yes
Internal equipment T2550 16 way:		10
'External' alarms pre-wired (DI8 in 1st base, 1st position):	Yes	Yes
Protection category:	IP54	IP54

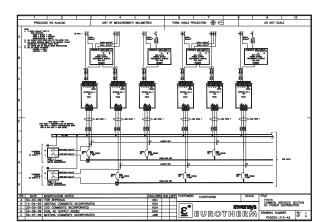
#### **Power supplies**

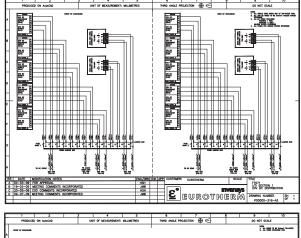
System mains supply: Input frequency: Auxiliary mains supply: Input frequency: Health status: 90-264V ac RMS 47-63Hz 115 or 230V ac 47-63Hz Green LED plus relay (N.O.) monitoring each PSU

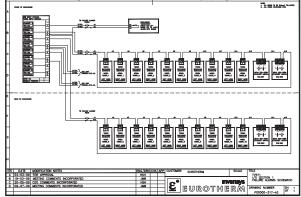
#### General/environmental

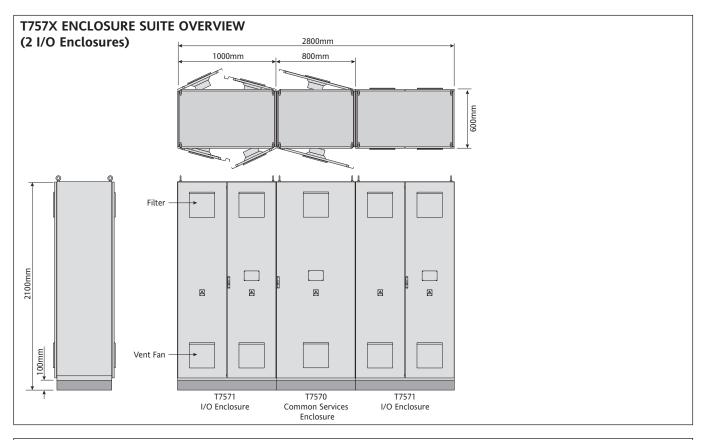
Storage temperature: Operating temperature: Relative humidity: Design standards Protection: Electrical, mechanical: Safety: CE -25°C to +85°C 0-35°C (0-50°C inside enclosure) 5 to 95% (non-condensing)

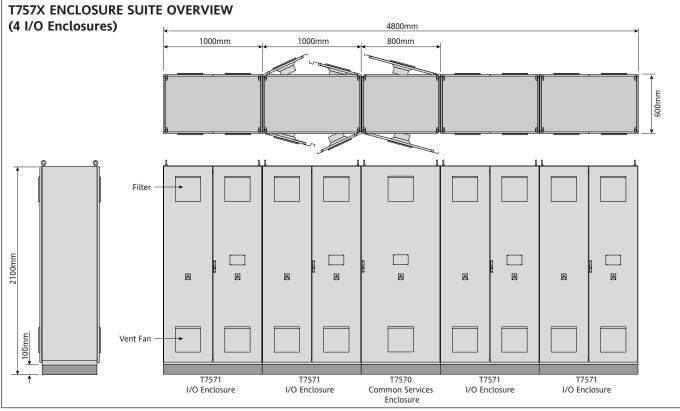
BS EN60529 IEC1131-2 EN60204-1 Conforms to EMC Directive 89/336/EEC and Low Voltage Directive 72/23/EEC

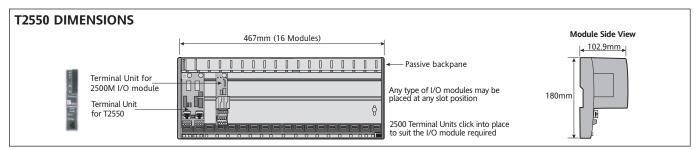






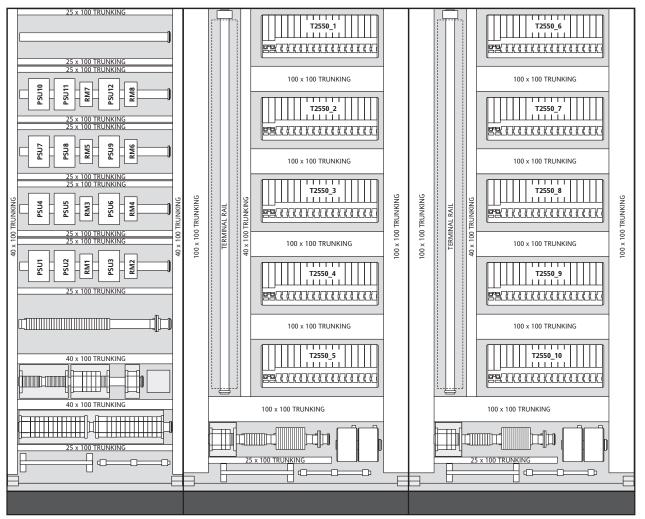






## **INSTALLATION DETAILS**

General arrangement – This is a 2 I/O enclosure system



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**T757X Series Specification Sheet** 

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