

FC506 Addressable Fire Control Panels

The FC506 easy-to-programme control panel has a four line, 40 character per line, LCD module display with a backlight, which provides written information regarding the system status, such as temperature, CO level, and smoke level, and is also used for programming the control panel. The front panel controls enable text and configuration changes.

The FC506 auto-addressing panel has 6-in-2 loops that can support up to 500 addressable devices and 256 zones. An IP board is available as an option for this panel.

Figure 1: FC506 front panel with FC500 repeater



Specifications:

- The mechanical enclosure is made of sheet metal.
- The front door is plastic.
- Dimensions, H x W x D: 493 mm x 429 mm x 124 mm

Features

Additional Panel Features

- Up to 800 mA current dynamically shared across three circuits in each of the two loops
- Auto mapping with Intelli-Zone feature
- Online Help function
- USB interface dual role Host/Device
- Multi users and multi installers (Up to two installers, eight users)
- Walk test function
- 4000 event log
- Loop break location
- Onboard PSTN communicator
- GSM/GPRS as external module
- Up to eight repeaters and up to seven FC500 series panel clients
- Event transmission through PSTN and IP
- Automatic drift compensation

Software Features

- Fast and simple system configuration, also available offline
- Transferable user database
- Device graphic displayed
- Battery and wiring calculation
- Customizable cables database
- Visualization of all the devices assigned to a single zone
- Remote real time visualization of control panel loop and zone status
- Easy Remote user interface with control buttons (reset, silence, evacuate)
- Multilevel map based on a tree structure
- Access device data from any pages of the map
- Configuration downloadable to USB memory stick
- Capability to print zone label sheet for front panel customization

Order information

Table 1: Product and accessories ordering information

Order number	Product details
Variants	
557.200.726	FC506: Six Loop Panel 500 Points
Accessories: SKU Description	
508.031.743	FC500IP3: IP Module
508.032.036	FC500BX: Cabinet for Spare 38 Ah Batteries
508.032.037	USB 5 m: USB 5 m Cable Type A
508.032.042	FC500DISP: Spare Display
557.202.726	FC-MAE: FC500 Panels Monitoring Software
557.200.727	FC500 FireClass Repeater

Table 1: Product and accessories ordering information

Order number	Product details
508.032.045	Spare Motherboard for FC506 six loop FireClass panel
557.202.132	Fireclass Connected Service Gateway (CSG) with enclosure. Includes a power cable and a serial cable.
557.202.141	Fireclass Connected Services PCBA, internal mounting. Includes a power cable and a serial cable.


Performance characteristics

Table 2: Performance characteristics

Description	FC506	FC500
Dimensions H x W x D	493 mm x 429 mm x 124 mm	234 mm x 345 mm x 55.7 mm
Weight	8 kg	2.7 kg
Operating Temp	-5°C to 40°C	
Storage Temp	-40 to 80 °C	
Humidity	Up to 95% Non Condensing	
Supply Voltage	230 VAC 50Hz - 15/+10%	19 VDC to 30 VDC
PSU I _{max} (Input Current)	1.5 A	130 mA (dc)
Aux output rated voltage	27.6 VDC	NA
Max Battery Size	17 Ah	NA
Loop power	800 mA	NA
IP Rating	IP30	
Enclosure colour (cabinet and door)	RAL 7035	

Approvals

Table 3: Approvals

 0051 19 Tyco Fire & Security GmbH, Victor von Bruns-Strasse 21, 8212 Neuhausen am Rheinfall, Switzerland.		CPR Approval				European Type Approvals					International Listings		
		EN 54-2	EN 54-4	EN 54-21	MED	LPCB	VDS	AFNOR	FNO	SB SC	FP ANZ	HK FSD	TFTF
FC506	DoP-2018-4260	x	x	x									
CSG-F	DoP-2023-4308	x		x									

All required Declarations and certificates are publically available on the website www.fireclass.net and are searchable by number or model name. The above fire detection products are components designed for use in Addressable Systems exclusively available to registered partners only. They are intended for installation by trained registered personnel only. Systems should be installed and configured according to local regulations.

Comparision of FC501, FC503, and FC506 features

Table 4: Comparison of FC501, FC503, and FC506 features

Feature	FC501	FC503	FC506
Addressable loops			
No. of Loops	One Loop	One Loop	Two Loops
Loop Splitter / Sub-Loops	3	3	6
Max. current draw for each loop	0.5 A*	1 A*	1 A*
No. of Devices	128	250	500
Outputs			
Fault	1	1	1
Fire	1	1	1
Programmable Open collector Outputs	2	2	2
USB Interface	1	1	1
RS232 Interface	1	1	1
RS485 Interface	1	1	1
24V (for RS485 Devices)	1, Max Current: 0.5 A	1, Max Current: 1 A	1, Max Current: 1 A
24 V Auxiliary	1, Max Current: 0.5 A	1, Max Current: 1 A	1, Max Current: 1 A
24V Resettable	1, Max Current: 0.5 A	1, Max Current: 1 A	1, Max Current: 1 A
Sounder / NAC Outputs	2, Max Current: 0.5 A per NAC	2, Max Current: 0.5 A per NAC	2, Max Current: 0.5 A per NAC
Power supply			

Table 4: Comparison of FC501, FC503, and FC506 features

Feature	FC501	FC503	FC506
AC Mains Voltage	230Vac to 15% /+ 10%, 50 to 60Hz		
PSUs	BAW75T24 (27.6 V, 2.7 A)	BAQ140T24 (27.6 V, 5.5 A)	BAQ140T24 (27.6 V, 5.5 A)
Maximum Battery Size (Inside Panel)	2 (12 A/h)	2 (17 A/h)	2 (17 A/h)
Maximum Battery Capacity	38 Ah	38 Ah	38 Ah
Battery Optional Box	YES	YES	YES
Panel Cabinet	Plastic Box	Metal box, plastic door	Metal box, plastic door

Table 4: Comparison of FC501, FC503, and FC506 features

Feature	FC501	FC503	FC506
Management software			
Software	FireClass console	FireClass console	FireClass console
Communication Channels	RS232, USB, RS485, IP	RS232, USB, RS485, IP	RS232, USB, RS485, IP
SW Zones	32	128	256
Number of zonal LEDs	8	8	8
Auto Addressing	YES	YES	YES
Events logged	4000	4000	4000
FC500 Repeaters	4	8	8
FC500 Clients	No Support	7	7
Standard compliance			
EN54-2	x	x	x
EN54-4	x	x	x
EN54-21	x	x	x
Communicators			
PSTN (Voice, Data)	On Board	On Board	On Board
IP	FC500IP (Add On)	FC500IP (Add On)	FC500IP (Add On)
Gateway**	CSG (Add On)	CSG (Add On)	CSG (Add On)

① Note:

*Absolute maximum value, the panel displays a warning on the screen when the current exceeds 80% of the maximum value.

**The CSG has an onboard PSTN and an IP communication facility. These features can support central station communication. When the CSG connects to a panel, the panel's PSTN facilities and the optional FC500IP card are not active.