



CEL Technical Datasheet

# Duo-Cel

## 2 - 8 Zone Conventional EN54 Approved Panels

EN54 (with CPD) approval is pending and will be realised in the near future



Duo-Cel Control Panel

Duo-Cel  
Conventional Panel

## Overview

Control Equipment Ltd. brings you yet another quality fire alarm panel!...

Based on the technology of our top range panels the Duo-Cel has been developed to bring our budget panel range up to date regarding functionality, and necessary approvals. The panel supports a wide variety of commonly available detectors, callpoints and sounders from various manufacturers and has many useful configurable options, inputs and outputs to aid with installation and retrofitting.

## General Features

- ◆ 2,4 & 8 Zone versions available in an aesthetically pleasing design.
- ◆ Sturdy, flame retardant, ABS plastic enclosure with controls, zone text insert & indications overlay
- ◆ Easy to install, program and use. Key operated controls access (no 'user confuser' codes!)
- ◆ Panel can be surface or semi flush mounted & has 20mm cable gland breakouts
- ◆ Comprehensive LED indications and user/engineer controls
- ◆ Low standby power consumption.
- ◆ 4 Sounder circuits 4 & 8 zone, 2 on 2 zone panel. Zonal & Alert sounder options configurable
- ◆ 1.5A switched mode power supply with temperature compensated battery charging
- ◆ Enclosure houses 3.4Ah SLA batteries as standard
- ◆ 8 Zone repeaters available with 24V or mains operation (suitable for 4 & 8 zone panels only)

10uF Capacitor for zone EOL device  
 10K Resistor for sounder circuit EOL device  
 Zone 1 non latching option  
 Zone dependency function  
 Callpoint Discrimination function  
 Alert/Evac. callpoint function  
 Zones, sounders & fire signal disablement

Independent zone testing  
 Sounder test mode  
 Fault monitored fire signal output  
 Earth fault monitoring  
 Short circuit zone activation option (global)  
 EOL zone resistor option for retrofitting (global)  
 3 repeater panels max.

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# Specifications

FUNCTION	Duo-Cel 2 - 8 Zone	Mains Repeater	DC Repeater
Mains Supply Voltage	230V ac (-15% to +10%)	230V ac (-15% to +10%)	N/A
Mains Frequency	47.5 - 63 Hz	47.5 - 63 Hz	N/A
Mains Fuse (Non Servicable)	3A 20mm Glass	3A 20mm Glass	N/A
Battery Fuse	2A 20mm FB Glass	2A 20mm FB Glass	N/A
Operating Temperature Range	-5° to 40° C	-5° to 40° C	-5° to 40° C
Max. Operating Humidity	95%	95%	95%
Max. Batt. Charger Output	28.15VDC >1.4A	28.15VDC >1.4A	N/A
Max. PSU Output	1.5A 18-29V	1.5A 18-29V	N/A
Conventional Sounder Circuits	4 (2 On 2 Zone)	N/A	N/A
Max. Alarm Circuit Output	28.4VDC 500mA	N/A	N/A
Max. Aux DC Output	28.4VDC 250mA	28.4VDC 250mA	N/A
Battery Type (Set required for 24V)	3.4Ah - 12Ah SLA	3.4Ah - 12Ah SLA	N/A
S/by / Mains Fail Alarm Current 2 Zone	23mA / 63mA	N/A	N/A
S/by / Mains Fail Alarm Current 4 Zone	28mA / 76mA	-	-
S/by / Mains Fail Alarm Current 8 Zone	36mA / 84 mA	17mA / 22mA	8mA / 13mA
DC Repeater Supply	N/A	N/A	20 - 30VDC
IP Rating	30	30	30
Panel Dimensions (mm W x H x D)	365 x 273 x 110	365 x 273 x 110	365 x 273 x 110
Native Panel Weight	2.2 Kg	2.2 Kg	1.8 Kg
Panel Colour	Light Grey RAL 7035	Light Grey RAL 7035	Light Grey RAL 7035

\* Note that Max. values take into consideration normal operation running on lowest temperature compensation

## Controls & Panel Connections

**User Controls** Controls Access Keyswitch  
Evacuate  
Silence Buzzer  
Silence/Resound Alarms  
Reset  
Disable  
Test  
Select

**Panel Indications** Supply On  
General Fire  
General Fault  
General Test  
General Disablement  
Alert/Evac On  
Fire Signal On  
Fire Signal Fault  
PSU Fault  
Fuse Failed  
Repeater Fault  
Remote Control Fault  
Controls On  
Repeater 1,2 & 3 Fault  
Zone Fires  
Zone Faults

**Repeater Comms.** 2 core screened RS485 data cable, 4 core if powered from panel

**Panel Terminals** Zones + & -  
Fire Signal + & -  
Fire Relay N/C,N/O & POLE  
Fault Relay N/C,N/O & POLE  
Remote Controls Input & 0V  
Disable, Evacuate & Buzzer Active Outputs  
Aux. 24VDC & 0V Outputs  
Repeater A & B Comms.  
Alarm Circuits + & -

**Other Inputs & Controls** Battery Spade Connectors Mounted On PCB  
Molex Power Supply Connector  
Engineers Alarm Counter Reset Button  
Dip switch activated programming options  
Earth Fault Disable link  
Firmware Programming Header

**Remote I/P Details** Input: Trigger Resistor Value:  
Class Change 4K7  
Alert 2K2  
Evacuate 1K  
Silence 470R  
Reset 220R

**Remote O/P Details** Evacuate Activated 50mA (30V)  
Buzzer Activated 50mA (30V)  
Disabled 50mA (30V)  
Fire Signal 28V 250mA (Monitored)

## Part Numbers

2605542 Duo-Cel 2 Zone Panel  
2605543 Duo-Cel 4 Zone Panel  
2605544 Duo-Cel 8 Zone Panel

2605545 Duo-Cel Repeater 230V ac  
2605546 Duo-Cel Repeater 24V DC

Specifications may be altered at any time