

- 1 to 64 addressable sensors
- 1-16 direct 4~20mA sensors - 2/3 wire
- 1 - 8 plug in direct catalytic cards
- Network up to 16 controllers enabling up to 1024 addressable sensors + direct sensors
- Single 4 core sensor network (addressable)
- Parameter set up via pc or front panel
- 3 alarm levels with time to alarm option
- Addressable relay board - 4 and 32 way - option
- Continuous data logging via pc - option (combi soft)
- Automatic safety check diagnostics/system surveillance
- System management via remote access



Combi has been designed to operate in the full range of environments from commercial premises through to heavy industrial applications which may require hazardous area sensing. Typical monitor locations are - public buildings, car parks, tunnels, breweries, boiler plant rooms, water treatment works, H&V control, manufacturing, process plants, horticulture, hotels, offices.

### Operation

Each gas sensor continuously monitors the atmosphere reporting any hazardous conditions to the control unit, for display by the alpha numeric screen indicating the reporting sensor, gas type, concentration and alarm status. Alarm levels that are exceeded will automatically activate a variety of signal outputs including analogue/digital data and user selectable relays.

The Combi system operates on a 4-core (addressable) or 2/3 core (direct) cable network and has the capacity to monitor up to 64 addressable and 16 direct sensors of various gas types. Larger systems offering unlimited sensors can be achieved using multiple combi units housed in a 19" rack based system or a network controller. The Combi is supplied ready to use with pre-calibrated gas sensors and provides for additional sensors that can be easily added to any point of the network.

Optional software (Combi Soft) allows full data logging facilities with system management providing real time views showing sensor locations, alarms status and actual gas values.

### Sensor points

1-64 addressable – CANbus – and/or  
16 direct 4~20mA

### Measurements

Combustible Gas - L.E.L., % vol  
Toxic Gas - ppm, % vol  
Oxygen - % vol - Depletion/Enrichment  
Refrigerant - ppm  
Any 4~20mA transmitter

### Indicators - control unit concentration

Dot matrix LCD 4 line 40 character - indicating sensor location, gas type, (rising or falling alarms), alarm status, system fault, sensor line fault, sensor fault, inhibit, real time clock, event memory  
Red LED - global alarm, Amber LED - global fault, Amber LED-inhibit

## Outputs

8 user selectable zone/voting – with NE/ND option and delay to de-energise

Relay contacts - 2 D.P.C.O / 6 S.P.C.O. rated @ 5A-230v AC

Factory set 1 common low alarm D.P.C.O or group 1  
1 common high alarm D.P.C.O or group 2  
1 common overrange S.P.C.O or group 3  
1 common fault alarm S.P.C.O or group 4  
4 user selectable S.P.C.O groups 5 to 8

General alarm relay - resettable S.P.C.O. for sounders etc.

Optional - 2 x 32 relays - first 16 programmable with pattern/event with NE/ND options and delay to de-energise - 48 are single event

Optional - remote addressable 4 way relay unit

RS232 data log - event log

Modbus - RS485 x2

Combi Soft: full data logging /management tool - option.

Individual sensor logging - intervals 1-60 mins storage readings 2880

## Audible alarm

Alarm/Fault - permanent mute option

## Power

230/115v AC or 24v DC  $\pm 15\%$

Control unit 7.5w quiescent 17w full alarm

Sensor - 1.25w

Internal power supply: 20 sensors max. 21+ sensors -

11A/24vDC Auxiliary Power Pack required C1541/C1293

## Sensor Cable - Addressable Direct

Main network - 4 core (2 power - 2 comms)

2/3 core (1.5mm<sup>2</sup> screened max length 1km)

Optional signal booster per additional 1km

## Miscellaneous

Enclosure cable entry - bottom, rear, top

Remote reset/mute

## Options

Repeater panel

16 way mV catalytic converter

8 way 4~20mA input CAN signal converter

8 way 4~20mA output module

4 way alarm relay module

2 x 32 way alarm relay panel

Sensor signal booster 1K+

Password protection - user mode/engineers mode

LCD and LED dimming

## Environmental

Control unit - IP52 - wall mount

Optional overhousing - IP65

Operating temperature: -10 to +50°C

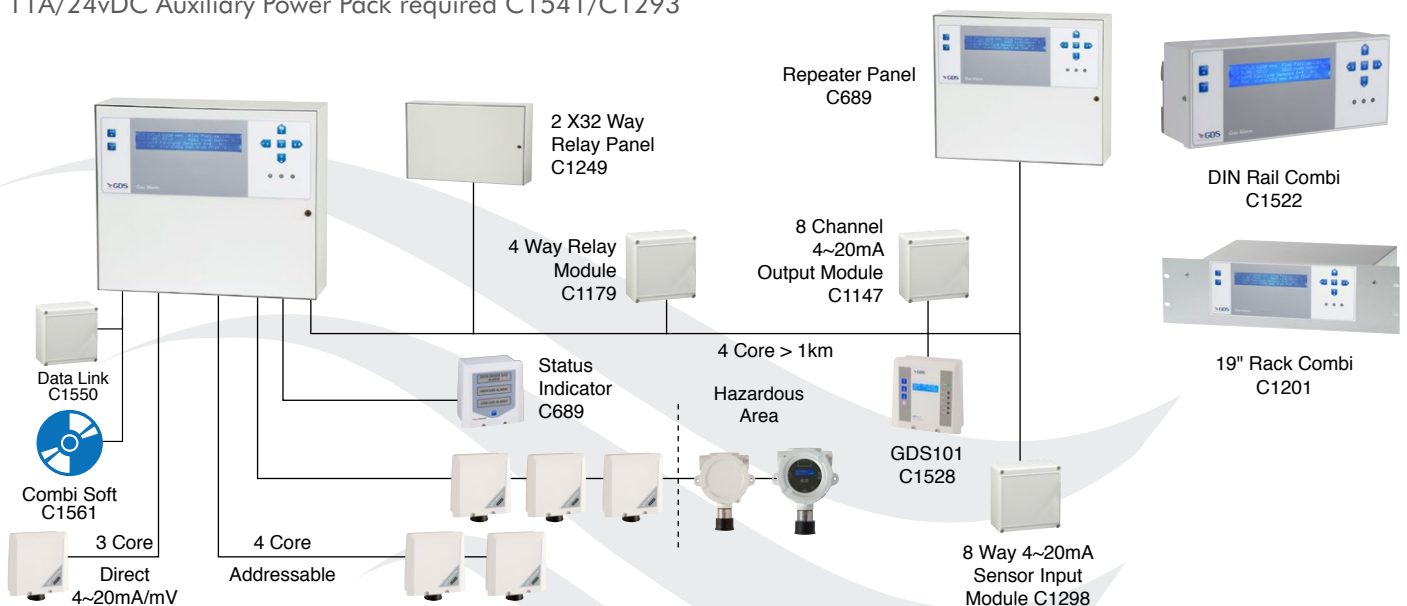
## Dimensions

315W x 265H x 95D - Combi panel

19" x 3U x 300mm Deep - rack panel

295W 120H x 80D Din rail module

315W x 265H x 95D - Auxiliary power pack



For Combi Controller configuration see C1046.

For Combi Network controller configuration see C1148.

This document is not contractual and the equipment specification may be modified at any time without prior notice.



C828

