

SYNTEL

Devices, interfaces and options

Addressable field devices
Many interfaces available
Customer specific interface

SYNTEL integrates a wide range of hazardous area devices on a secure, fault tolerant addressable network. Standard and client specific HMI's are available along with communication interfaces to third party systems.

SYNTEL is a distributed intelligent network with each device having a unique address.

The system communicates without a bus master. Each device transmits and receives bi-directional data, without a centralised processor. Each SYNTEL device is intelligent and has built-in fault isolation, if a short or open circuit is detected the units either side of the fault isolate the error without affecting system performance.

SYNTEL Multi-Range devices can be interfaced and addressed directly whilst any unit having a 4-20mA output (e.g 3rd party products) can be interfaced using a MECH.

Each device / node stores information concerning a range of parameters in non-volatile memory.

A wide range of HMI interfaces are available using point and click navigation. Detailed data acquisition, display and login, as well as SYNTEL configuration capabilities are made available which can be tailored to Client specific requirements. High quality graphics allow detailed plant layouts to be presented these also show device location. Simtronics documentation can also be accessed through some interfaces.

Features

Large range of addressable detectors

Universal device interface

Large range of interface modules

Integral OPC server

Standard or Ex housing modules

Large range of HMI options

Benefits

Wide product choice

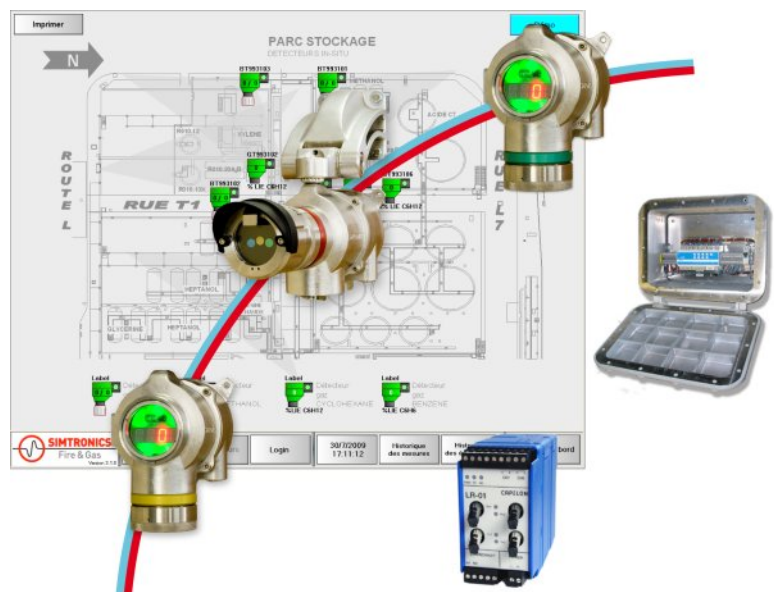
Interfaces 4-20mA signals

Allow easy access to SYNTEL network

Standardised interface for 3rd party systems

Suitable for use in Ex or non-Ex areas

User choice in HMI requirements



SYNTEL devices



CATALYTIC FLAMMABLE GAS DETECTOR

Technology: low temperature oxidation process
Detects: flammable gases
Range: 100% LEL
Housing: aluminium or stainless steel



ELECTROCHEMICAL TOXIC GAS DETECTOR

Technology: electrochemical cell
Detects: toxic gases, oxygen, ppm hydrogen
Range: see data sheet
Housing: aluminium or stainless steel



SOLID-STATE (MOS) GAS DETECTOR

Technology: solid-state semiconductor
Detects: H₂S
Range: 50, 100, 200ppm
Housing: aluminium or stainless steel



MULTI-SPECTRUM IR FLAME DETECTOR

Technology: 3 x IR or UV/2xIR
Detects: hydrocarbon fires
Housing: aluminium or stainless steel

Other devices



IR POINT GAS DETECTOR

Technology: IR absorption
Detects: hydrocarbon gases, CO₂
Range: 100% LEL, % volume
Housing: stainless steel



IR EXPENDED POINT GAS DETECTOR

Technology: IR absorption
Detects: hydrocarbon gases
Range: 20% LEL
Housing: stainless steel



LASER OPEN PATH GAS DETECTOR

Technology: near IR laser scanning
Detects: H₂S, CO₂
Range: 0-200ppm.m H₂S
Path lengths: 5-50m
Housing: stainless steel



OPEN PATH IR GAS DETECTOR

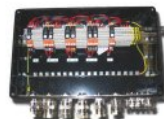
Technology: IR absorption
Detects: methane
Range: 5 LEL.m
Housing: stainless steel

Modules and interfaces



PROGRAMABLE RELAY MODULE

Can be placed close to the application
Hazardous or non hazardous areas
Relay module 8 inputs - 8 outputs
LEDs indicate input/output state
Programmable logic with SYNTEL interface



EX DISTRIBUTION LOOP BOX

Enables local power distribution
Ex approved
Provides up to 4 energized loops



SYNTEL / MODBUS COUPLER

CML is a coupler (gateway) between MODBUS/JBUS and SYNTEL.

CML is the slave of a ModBus master. It enables access to the reading and writing functions of the ModBus table.

Rail DIN format, use in non-Ex areas.



LON / IP INTERFACE

NIC/iP module is an interface between SYNTEL and a client iP c network, links to SCADA or HMI.

Rail DIN format, used in non-Ex areas.



FIBRE OPTIC COUPLER

LR01 is a dual channel LON/Fibre optic interface. It enables data transmission over long distances.

Rail DIN format, used in non-Ex areas.



MECH

Interface module between a 4-20mA output device and SYNTEL network.

Ex or safe area use.

Accepts up to 4 x 4-20mA devices.

Options



RACKABLE PC WITH TOUCH SCREEN

Industrial rack mount PC touch screen interface for configuration and maintenance.

Designed to Client requirements.



MAINTENANCE VIEW

Enables rapid visualisation of device location and state.

Detailed device state available in one click.



SUPERVISION

Simtronics offers SYNTEL with one or more HMI's.

Plant-wide mimic usually provides top level screen.

Interface designed to Client specific requirements.