



# HYC3420 INTELLIGENT DIGITAL INDICATOR

**HYC3420** is a highly accurate and stable digital indicator.

Designed without compromise HYC3420 uses leading edge technology to accept all commonly used process inputs. Engineering units are displayed on a high efficiency Red LED display that provides daylight readability.

The display can be set to show a fixed number of decimal places or to auto scale to show the maximum resolution.

The innovative case design enables option 'Pods' to be easily installed without the need for dismantling or re-calibration. 'Plug and Play' Pods are available covering:-

Relay outputs

Isolated re-transmission (0-10, 0-20, 4-20 mA)

The flexibility of plug-in option pods combined with the switch mode power supply results in reduced stock holdings and, low 'cost of ownership'.

The front is sealed to IP65 and the case has a moulded-in rubber gasket to seal to the panel maintaining the IP65 rating, ideal for 'dusty' areas or where low pressure jets of water are used to clean down equipment.

Tension clamp two part connectors are provided for 'fast wiring' enabling installation to be completed in typically half the time it would take using conventional screw terminals. These high quality connections are manufactured to IEC-947-1 and IEC-947-7 standards and maintain the contact permanently under tension to also provide superior long-term performance in the presence of vibration.

#### **SET UP**

Programming is via the front panel keys following a logical menu structure which can be set to 'Short' (default), whereby only the common usage features are presented to the operator, or 'Full' where the full range of programmable features is available.

## **MENU MODE**

Two front panel programming menus can be selected as follows with the option of password protection.



# TRANSMITTER EXCITATION

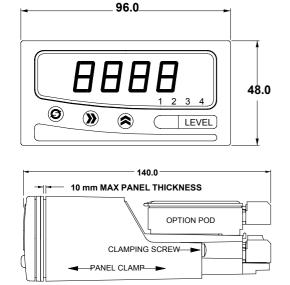
**IP65 FRONT PANEL SEALING** 

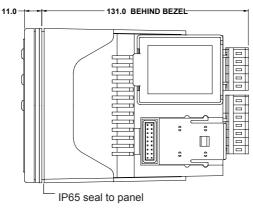
PLUG & PLAY OPTION PODS

**COMPETITIVE COST** 

2 YEAR WARRANTY

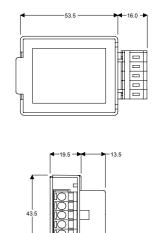
# **MECHANICAL DETAILS in mm**





Weight 230gms. Panel cut out 92 x 45mm

Material ABS/PC Flammability IEC707 FV0



# **SPECIFICATIONS**

**HYC3420** accepts all common process signals, current or voltage, and displays the signal digitally in engineering units. An internal power supply provides excitation for field transmitters.

#### **PROCESS**

Voltage Range 0-1V

1-5V

0-10V

span 100 ppm/°C

Current Range 0-20 mA 4-20 mA

0-10 mA

Input Impedance 47 ohm (current)

1 Mohm (voltage)

Accuracy 0.05% FS
Thermal Drift 100 ppm/°C

Excitation 24V ±5% @ 50 mA

### **GENERAL SPECIFICATION @ 20°C**

Input/output isolation 500 V AC rms (Galvanically Isolated)

Update time 250 ms maximum

Time constant (Filter off) <1 second (to 63% of final value)
Filter Factor Programmable: Off, 2 seconds, 10 seconds or Adaptive

Warm-up time 2 minutes to full accuracy

Display range -999 to 9999

Power Supply S1 90-253 V AC 50/60 Hz

S2 20-35 V DC

Power Consumption 10VA Max. (options fitted)

#### **DISPLAY**

4 Digit RED LED standard 14.2mm high / high intensity 4 Digit GREEN LED option 14.2mm high / high intensity

4 Alarm RED LED indicators 2.5mm high numeric

#### **ENVIRONMENTAL**

Sealing to panel IP65

Ambient operating range -30 to +60 °C Ambient storage temperature -50 to +85 °C

Ambient humidity range 10 to 90% RH non condensing

## **APPROVALS**

EMC BS EN61326

**ELECTRICAL SAFETY** BS EN61010-1

#### **OUTPUT OPTIONS**

#### **Plug and Play Option Pods**

Simple plug in pre-calibrated units, no dismantling or recalibration

### Pod-3000/02 Dual relay Alarm

Two independent relay outputs

Contacts 2 x Changeover relays (common feed)

Ratings AC DC

Maximum Load 5A@250V 5A@30V

Maximum Power 1750VA 210W

Maximum Switching 253V 125V

Electrical Life 10<sup>5</sup> operations at rated load

Mechanical Life 50 million operations

Termination Standard 5 way tension clamp connector

Optional Screw terminals

#### Pod-3000/03 Isolated re-transmission

Ranges 0-10mA (Active or Passive)

0-20 mA (Active or Passive) 4-20 mA (Active or Passive)

Minimum current output 0 mA

Maximum current output 23 mA

Accuracy 0.07% F.S.

Max. Output loadActive 1 K ohm

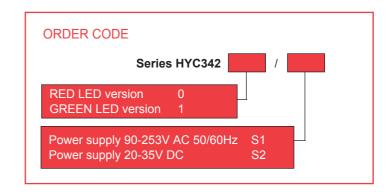
Passive [(Vsupply-2)/20] K ohms

Max. External Supply Voltage 30V (Passive mode)

Voltage effect $0.2 \,\mu\text{A/V}$ Ripple current $<3\mu\text{A}$ Isolation500V ACStability $1\mu\text{A/°C}$ 

Termination Standard 5 way tension clamp connector

Optional Screw terminals



# FAX: 01527-406810 FOR MORE INFORMATION

Name:	Position:	
Company:		
Address:		
Tel:	Fax:	Email: