# intelligent displays
eight variables

If you need to display process variables, text and simple graphics, or require a low cost operator interface in a safe or hazardous area, BEKA has an intelligent display just right for your application and protocol.

Field and panel mounting models are available for use in safe and hazardous areas with Profibus PA, FOUNDATION fieldbus™, Modbus or simple ASCII protocols. Each instrument can display up to eight process variables on a high contrast backlit display using one of nine standard display screens, or custom screens can be developed.

> Large high contrast easy to read display with backlight
> FOUNDATION fieldbus™, Profibus PA, Modbus or simple ASCII protocols
> Displays up to eight process variables on one of nine selectable screen formats, or custom screen formats may be developed using free software.
> Push-buttons for operator acknowledgements with provision for connecting large external switches.
> Isolated switch outputs
> Robust IP66 GRP field mounting models
> Panel mounting models with IP66 front
> ATEX, IECEx and FM certified Intrinsically Safe models
> FM certified nonincendive models

Applications

■ Display of up to eight process variables in a hazardous or safe area.

■ Operator messaging and acknowledgement.

■ Setpoint adjustment

■ Recipe selection

■ OEM applications – weighing, machine monitoring
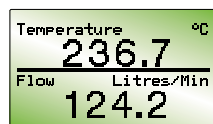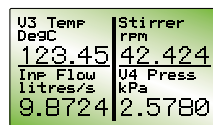
Two variables

One variable + vertical bargraph

One of nine standard screen formats may be selected or custom screens can be developed
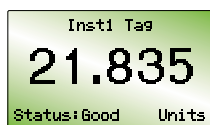
One variable

Four variables
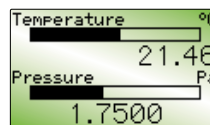
Two variables + horizontal bargraphs

Two variables + vertical bargraphs

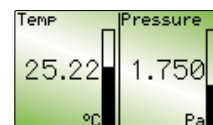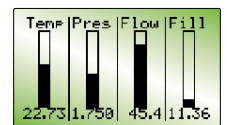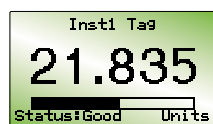Four variables + vertical bargraphs

One variable + horizontal bargraph
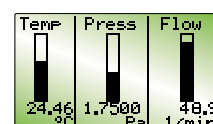
Three variables + vertical bargraphs

Typical custom screen

Modbus-IDA
the architecture for distributed automation

simple ASCII Modbus

Hazardous area

Safe area

Simple ASCII
or Modbus
protocol

**Zener barrier or
isolator to power
beacon**

Power

**BA484D Intrinsically Safe
Serial text display
8 variables**

80 rpm
38.2 °C

**Up to 4
Serial
text
displays**

Power

**Two isolated
outputs can
switch lamps,
sounders, beacons
or valves**

**Communication
isolator**

RS232
RS422
RS485

**BA688C
Serial text display
8 variables**

Temperature °C
236.7
Flow Litres/Min
124.2

Power

**Up to 6 external
switches may be
connected**

RS232
RS485

**BA488C Intrinsically Safe
Serial text display
8 variables**

TL1_102
Open   Shut

**BA684D
Serial text display
8 variables**

Temp Press Flow
24.46 1.7500 48.9
°C   Pa   l/min

Power

**Zone 0, 1 or 2
Div 1 or 2**

RS232
RS485

FOUNDATION Fieldbus™
Profibus PA

Hazardous area

Safe area

All models can be supplied with 6 alarm outputs

BA488CF Intrinsically Safe Fieldbus display 8 variables

Intrinsically Safe Fieldbus power supply and segment coupler

System host

Junction box

Fieldbus power supply and segment coupler

BA484DF Intrinsically Safe Fieldbus display 8 variables

H1
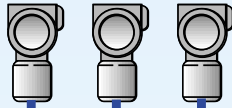
BA688CF Fieldbus display 8 variables

Up to 6 external switches may be connected
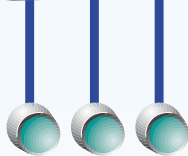
Up to 6 external switches may be connected

Zone 0, 1 or 2
Div 1 or 2
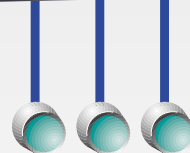
BA684DF Fieldbus display 8 variables

fieldbus indicators
single variable

> Low cost solution when only one displayed variable is required
> 5 digit 20mm high display plus 31 segment bargraph
> FOUNDATION fieldbus™
> Fieldbus powered, 13mA
> ATEX, FM & IECEx intrinsically safe models
> ATEX type nL for Zone 2 applications
> Robust IP66 GRP field mounting enclosure
> Panel mounting enclosure with IP66 front

Hazardous area

Safe area

**BA418CF Intrinsically Safe
Fieldbus indicator
Single variable**

FI-05

-41800

Gallons/day

**Intrinsically Safe
Fieldbus power
supply and
segment coupler**

System host

Junction box

**BA414DF Intrinsically Safe
Fieldbus indicator
Single variable**

F138

624.14

m³/day

**Fieldbus power
supply and
segment coupler**

H1

BA618CF

Pallet Weight

618

kg

**BA618CF
Fieldbus indicator
Single variable**

TI-306

361.4

°C

**BA614DF
Fieldbus indicator
Single variable**

**Zone 0, 1 or 2
Div 1 or 2**

intelligent display
& indicator models

Serial Text Displays – 8 variables   *Simple ASCII*   *Modbus*

Model	Mounting	Certification	Interface	Port	Protocol
BA484D	Field	ATEX II 1G or II 1GD T80C IP66 EEx ia IIC T5 FM IS Cl I II III, Div 1, Gp ABCDEFG NI Cl I, Div 2, Gp ABCDEFG	BEKA BA201 or MTL5051	RS232 RS422 RS485	Modbus or Simple ASCII
BA488C	Panel	ATEX II 1G EEx ia IIC T5 FM IS Cl I, Div 1, Gp ABCD NI Cl I, Div 2, Gp ABCD			
BA684D	Field	Safe area only	Not required	RS232 or RS485	
BA688C	Panel	Safe area only	Not required		

Fieldbus Displays – 8 variables   FOUNDATION Fieldbus™   *Profibus*

Model	Mounting	Certification	Protocol
BA484DF	Field	ATEX II 1G or II 1GD T125C IP66 EEx ia IIC T4 IECEx FM IS Cl I II III, Div 1, Gp ABCDEFG NI Cl I, Div 2, Gp ABCDEFG FISCO & FNICO compliant	FOUNDATION fieldbus™ or Profibus PA
BA488CF	Panel	ATEX II 1G EEx ia IIC T4 IECEx FM IS Cl I, Div 1, Gp ABCD NI Cl I, Div 2, Gp ABCD FISCO & FNICO compliant	
BA684DF	Field	Safe area only	
BA688CF	Panel	Safe area only	

Fieldbus Indicators – single variable   FOUNDATION Fieldbus™

Model	Mounting	Certification (pending Summer 06)	Protocol
BA414DF	Field	ATEX II 1G or II 1GD T125C IP66 EEx ia IIC T4 IECEx FM IS Cl I II III, Div 1, Gp ABCDEFG NI Cl I, Div 2, Gp ABCDEFG FISCO & FNICO compliant	FOUNDATION fieldbus™
BA414NDF	Field	ATEX II 3G or II 3GD T125C IP66 EEx nL T4 FNICO compliant	
BA418CF	Panel	ATEX II 1G EEx ia IIC T4 IECEx FM IS Cl I, Div 1, Gp ABCD NI Cl I, Div 2, Gp ABCD FISCO & FNICO compliant	
BA614DF	Field	Safe area only	
BA618CF	Panel	Safe area only	