Intrinsically Safe Field Display
for use with Easidew I.S. and Easidew PRO I.S.

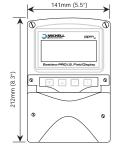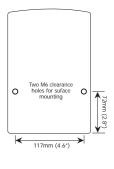**Easidew PRO I.S for illustration purposes only. Transmitter available separately.**

The Intrinsically Safe Field Display is a 4-digit loop-powered local monitor for the Easidew PRO I.S. and Easidew I.S. transmitters. It is certified with ATEX, IECEx, and FM and housed in an IP66 enclosure with a terminal compartment for wiring. The measurement unit can be labelled as ppm_v, ppm_w, °C dp or °F dp.

Highlights

- Loop powered 4-20mA indicator. Intrinsically safe certified with ATEX, IECEx, and FM
- Operating temperature between -40 and +70°C (-40 and +158°F)
- Bold 34mm high 4 digit display with optional backlight
- Robust GRP enclosure providing IP66 protection. Can be mounted by itself or inside a sampling system enclosure
- Built-in terminal compartment for easy wiring
- Two optional galvanically isolated solid state alarm outputs

Dimensions

141mm (5.5")
212mm (8.3")

Two M6 clearance holes for suface mounting
72mm (2.8")
117mm (4.6")

72mm (2.8")

Three cable entries M20 x 1.5 tapped (Plain, unthreaded 22.25mm diameter entries for FM and cFM version)

Technical Specifications

Input

Current	4 to 20mA
Voltage drop	Less than 1.2V at 20°C (68°F) Less than 1.3V at –40°C (-40°F) Less than 5V with optional loop powered backlight

Display

Type	Liquid crystal, non-multiplexed 4 digits 34mm high
Resolution	Dewpoint: 0.1 °C/°F ppm_v/ppm_w: 1 for 1000 – 9999 0.1 for 100.0 – 999.9 0.01 for 10.00 – 99.99 0.001 for 0.000 – 9.999
Span	Adjustable between 0 & ±9999 with a 20mA input
Zero	Adjustable between 0 & ±9999 with 4mA input
Over-range/Under-range	9999 or –9999 with all decimal points flashing

Certification (Display Only)

ATEX	Group II Category 1GD Ex ia IIC T5 Ga Ta = -40 to +70°C
IECEx	Ex ia IIC T5 Ga Tamb = -40 to 70°C
FM	CL I, II, III: Div 1: GP A, B, C, D, E, F & G T4 @ 70°C (158°F)

Environmental

Operating temperature	-40 to +70°C (-20 to +60°C for FM version) (-40 to +158°F (-4 to 140°F for FM version))
Storage temp	-40 to +85°C (-40 to +185°F)
Humidity	to 95% at 40°C (104°F) non-condensing
Enclosure	IP66

Mechanical

Terminals	Screw clamp for 0.5 to 1.5mm² conductors
Weight	1.7kg (3.75 lbs)

Accessories

Backlight	Green, loop powered. Voltage drop of indicator plus backlight less than 5V
Alarms	Two alarm outputs each of which may be independently configured. Isolated solid state switch complying with requirements for simple apparatus. R_{on} 5Ω + 0.7V max R_{off} 1MΩ min
External keypad	Membrane keypad enables indicator to be configured without removing cover.
Stainless steel legend plate	Etched legend plate with tag number or application attached to front of the instrument
Pipe mount kit	Stainless steel bracket secured by two stainless steel worm drive hose clips for 60 to 80mm outside diameter vertical or horizontal pipe

Intrinsically Safe Field Display

Electrical Connections

Hazardous Area | Safe Area

I.S. Galvanic Isolator (can be purchased with Easidew PRO I.S.)

4/20mA circuit

4/20mA

Accessories

Pipe mount kit	**EPD-PMK**
Connection kit (including 2 cable glands and 0.5 meter cable BS5308, crimped)	**EPD-CAB**

Ordering Codes

To construct the order code, select the relevant feature from the tables below, starting with the base model, which is {Feature A} and then add on option to create a string:
{Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}+{Feature F}+{Feature G}

Order example: EPD + BX(0/100P) + C1 + D2 + E1 + F1 + G1
Easidew PRO I.S. Field Display, 0 to 100 ppm_V, no backlight, tag plate, no alarms and no keypad, ATEX+IECEx certification.

EPD	BX(0/100P)	C1	D2	E1	F1	G1

Base Model {Feature A}

I.S. Field Display	EPD

Range {Feature B}

-100 to +20°C (-148 to +68°F) dew-point input range	B1
v = zero value (must be the same as the associated transmitter) w = full scale value (must be the same as the associated transmitter) x = unit – must be the same as the associated transmitter – (C = °Cdp, F=°Fdp, P=ppm_V)	BX

Backlight {Feature C}

No backlight	C1
Backlight (no additional wiring required)	C2

Certification {Feature G}

ATEX Gas, IECEx	G1
ATEX Gas and dust, IECEx	G2
ATEX Gas, IECEx, FM, cFM (cable entries change from M20 to plain, unthreaded 22.25mm diameter entries)	G3

Keypad {Feature F}

No keypad	F1
External keypad	F2

Alarms {Feature E}

No alarms	E1
Alarm switch (dual, galvanically isolated solid state)	E2

Tag Plate {Feature D}

No tag plate	D1
Stainless steel tag plate (maximum 12 characters)	D2

MICHELL Instruments