

# INTRINSICALLY SAFE PROCESS REFRACTOMETER FOR HAZARDOUS AREAS

# K-PATENTS

PROCESS INSTRUMENTS



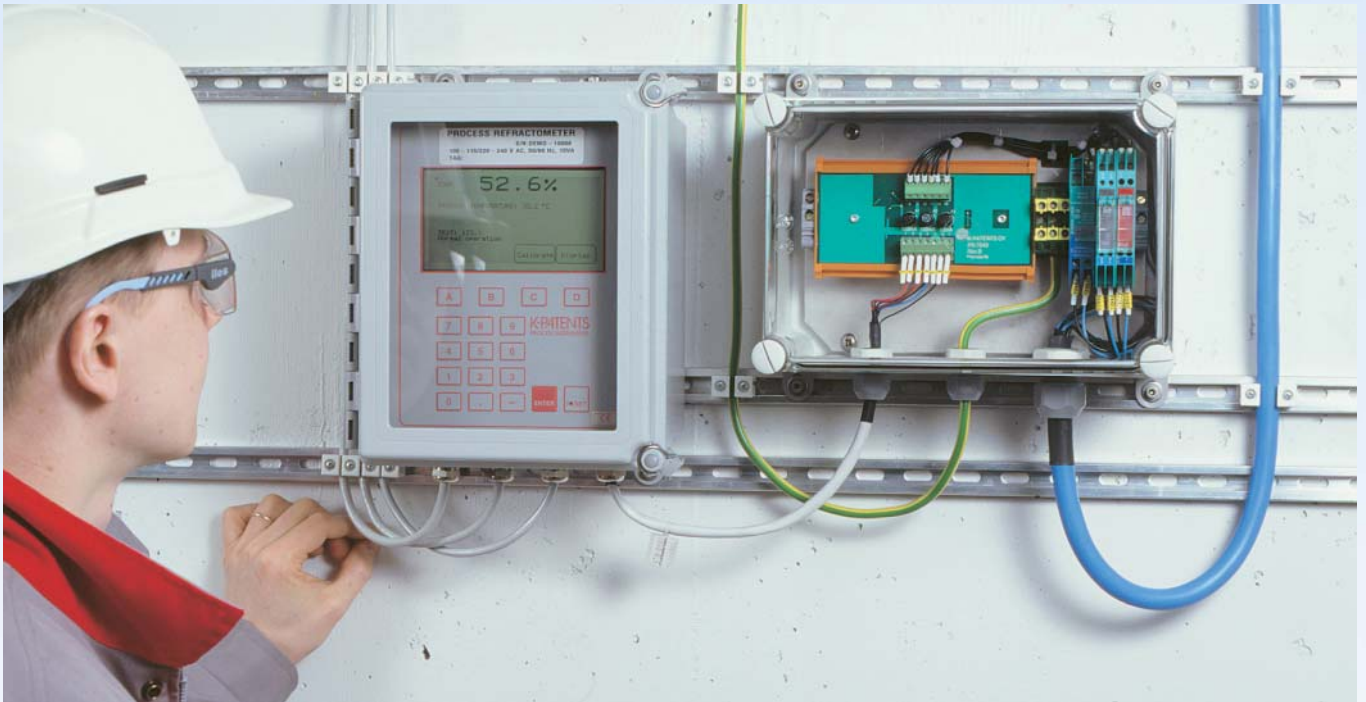
KEMA Certified for  
ATEX EX II 1 G  
Cenelec E Ex ia IIC T4  
( $T_{amb} = -20...+45^{\circ}\text{C}$ )



FMRC Certified for  
Class I, Division 1,  
Groups A, B, C, D, T4  
( $T_{amb} = 45^{\circ}\text{C}$ )



CSA Certified for  
Class I, Groups A-D



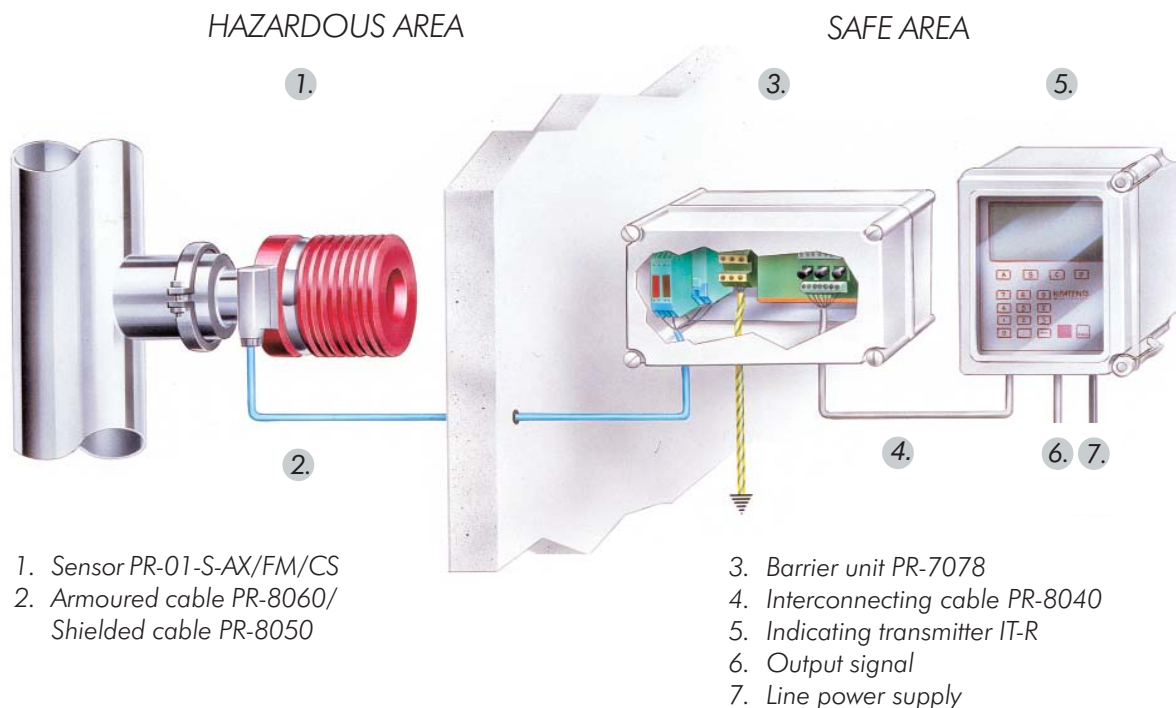
The K-Patents Intrinsically Safe System consists of an Intrinsically Safe Sensor installed in the hazardous area, and an Indicating Transmitter and a Barrier Unit installed in the safe area.

## PROCESS REFRACTOMETER PR-01-S-AX/FM/CS

# SPECIFICATIONS

## INTRINSICALLY SAFE CLASSIFICATIONS AND APPROVALS

<b>Model PR-01-S-AX:</b>	Certified by KEMA Quality B.V. under the European ATEX directive 94/9/EC EC-Type Certificate Number: KEMA 03ATEX 1364X
<b>ATEX Classification:</b>	ATEX EX II 1 G / Cenelec E Ex ia IIC T4 ( $T_{amb} = -20...+45^{\circ}\text{C}$ )
<b>Model PR-01-S-FM:</b>	Certified by FMRC (Factory Mutual Research Corporation) Approval No. 2Y7A7.AX
<b>FMRC Classification:</b>	Class I, Division 1, Groups A, B, C, D, T4 ( $T_{amb} = 45^{\circ}\text{C}$ )
<b>Model PR-01-S-CS:</b>	Certified by CSA (Canadian Standards Association) Certificate No. LR113053-1
<b>CSA Classification:</b>	Class I, Groups A-D
<b>SYSTEM SPECIFICATIONS</b>	
<b>Sensor:</b>	PR-01-S-AX or PR-01-S-FM or PR-01-S-CS
<b>Barrier unit PR-7078:</b>	containing two Zener barriers, one Opto-isolated barrier, and Barrier power unit
<b>Barrier unit enclosure:</b>	IP67 Nema 4X, Enclosure classification: EEx e II
<b>Barrier unit dimensions:</b>	278 x 188 x 180 mm (11 x 7.4 x 7.1")
<b>Indicating transmitter:</b>	IT-R, Standard
<b>Interconnecting cable PR-8040:</b>	Shielded cable between Indicating transmitter and Barrier unit, max. length 100 m (330 ft),
<b>Cable options:</b>	Armoured cable between Sensor and Barrier unit, model PR-8061, max. length 200m (660 ft), Shielded cable between Sensor and Barrier unit, model PR-8050, max. length 200 m (660ft)



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K-Patents reserves right to technical alterations