



# ELECTRON MACHINE CORPORATION

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## MPR E-Scan

Food

HYBRID-DIGITAL REFRACTOMETER

### WORLD'S MOST RUGGED IN-LINE PROCESS REFRACTOMETER

- ▶ Stainless-steel CNC machined sensing head
- ▶ Sapphire Prism
- ▶ Daylight visible color display
- ▶ NEMA 4X Fiberglass electronics console
- ▶ 4-20mA & RS-232 outputs
- ▶ (2) Input & (6) Configurable output relays
- ▶ In-house manufactured in USA
- ▶ 24 Hour Service Support

The MPR E-Scan is a hybrid-digital critical angle refractometer. It is used to measure the refractive index of process fluids and may be used as an error indicator or an integral part of a complete process control system.

With an extremely durable Sapphire prism as its foundation, the hybrid-digital design provides digital accuracy with rugged components in the sensing head. This combination produces the essential dependability required for years of use when installed in harsh industrial environments.

#### TYPICAL APPLICATIONS

Sucrose, Fructose & Dextrose

Soft Drinks, Fruit Juices, Dairy

Apple Sauce, Jams & Jellies

Beer, Wine, Coffee & Tea

Vegetable Oils

Tomato Paste

Honey

#### OPTIONS

Flush panel mounting of console

PID Control

Multi-range capability

Isolated 4-20mA & RS-422/484 outputs

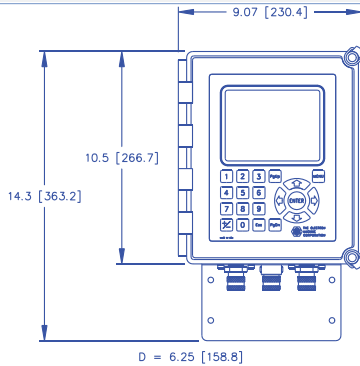
**Model MPR E-Scan : Standard Features**

Accuracy/ Repeatability	± 0.0002 RI (corresponds typically to ± 0.1% by weight)
Response Time	0.25 seconds to 15 minutes
Span	Configured for specific application for max. resolution
Display	Color TFT-LCD with LED backlighting 640 X 480 Pixel, daylight-readable
Process Temperature	-40°C to 150°C (-40°F to 300°F) without air purge
Sensing Head Wetted Materials	2205 Full Duplex S/S, Sapphire, Peek® or VITON®
Service/Support	24HR Technical hotline and fast response for repairs/parts
Standard Outputs	4-20mA non-isolated, 0-10 Vdc non-isolated, RS-232 (6) configurable output relays & (2) configurable input relays
Interconnecting Cable	6M (20FT) standard 300M (1000FT) maximum

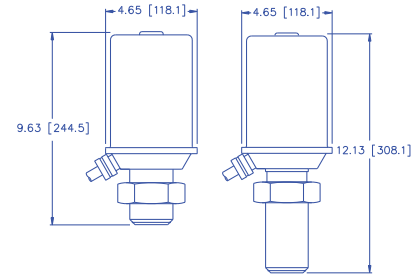
**Model MPR E-Scan : Optional Features**

Control	Measurement & Temperature PID Control
Outputs	RS-422/484 & Isolated 4-20mA 4-20mA (temperature, measurement)

Vortex cooled electronics console, Multi-range capable & Severe duty for extreme vibration/heat



**Standard      Extended**



Sanitary Adapter



Spool Adapter



Vessel Mount Adapter

