



World-Class Instrumentation for the Global Vehicle Marketplace

# UIP-S – Universal Instrument Panel-Specialized



## Features

- ◆ 9 to 32-volt operation
- ◆ 42 telltales
- ◆ CAN J1939 data bus communication
- ◆ Four minor gauges
- ◆ Two major gauges
- ◆ 2 line x 20 character dot matrix LCD
- ◆ Diagnostics and fault codes
- ◆ Stepper motor driven needles
- ◆ Multi-language support
- ◆ Integrated warning buzzer
- ◆ Customizable appliqué, warning icons and colors
- ◆ Pulsed speed input, resistive, and switched input capability

## Applications

- ◆ Commercial trucks
- ◆ Cranes, road-building, and construction equipment
- ◆ Buses, coaches, and recreational vehicles
- ◆ Earth-moving, and mining vehicles
- ◆ Utility and emergency vehicles
- ◆ Farm and agricultural vehicles

**AMETEK VIS' UIP-S Universal Instrument Panel** is a new addition to the UIP family. The cluster is based on field-proven Next Generation Instrumentation (NGI) architecture and can be easily customized to fit your application with minimal cost and time.

UIP-S has 42 telltales, 4 minor gauges, 2 major gauges and a 2x20 LCD. Communications are received through the J1939 CAN data bus, analog sensors or discrete switches. The cluster contains micro-stepping motors with increased resolution for a smooth needle movement.

The display indicates J1939 CAN engine and transmission data, fuel usage, service data, as well as diagnostics, fault codes, and self-test capability. Two switches with tactile feedback provide user interface. Increased functionality is provided with multi-language support.

The UIP-S meets all SAE J1455 and J1113 requirements for vehicular instrumentation.

*UIP-S offers a highly customizable Universal Instrument Panel that can be rapidly adapted to satisfy your vehicle requirements!*

**AMETEK®**  
VEHICULAR INSTRUMENTATION SYSTEMS

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## Specifications

### Physical Characteristics

Housing material – Black polycarbonate ABS plastic  
 Front lens material – Clear acrylic  
 Pointers – Tip-to-cap illuminated orange  
 Sealing – IP52 Front and Rear  
 Connectors – One 26 pin AMP 953236-1  
                   One 40 pin AMP 953118-4  
                   Four 8-pin Tachograph style

### Environmental Characteristics

Temperature and humidity – Meets or exceeds  
 SAE #J1455-1994-08  
 Shock and vibration – Meets or exceeds  
 SAE #J1455-1994-08  
 Salt spray – Meets or exceeds SAE #J1455-1994-08

### Electrical Characteristics

Operating limits – 9 to 32 VDC, reverse polarity protected  
 Jump-start protection:  
 12-volt input – withstands 24 VDC for 10 minutes  
 24-volt input – withstands 36 VDC for 10 minutes  
 Transient protection – meets or exceeds SAE #J1455-1994-08

### Electrical Inputs

Input voltage – 9 to 32 VDC  
 Input current – .5 to 2 amperes  
 Backlight power – Battery, variable through dimmer control  
 Ignition – Battery through ignition switch  
 Data bus – SAE #J1939 CAN  
 Switched – 34 switch-to-ground, 8 switch-to-battery  
 Analog – 5 voltage and resistance

### Electrical Outputs

Data bus – SAE #J1587 or SAE #J1939  
 Switched – 2 switch-to-ground, 500mA each

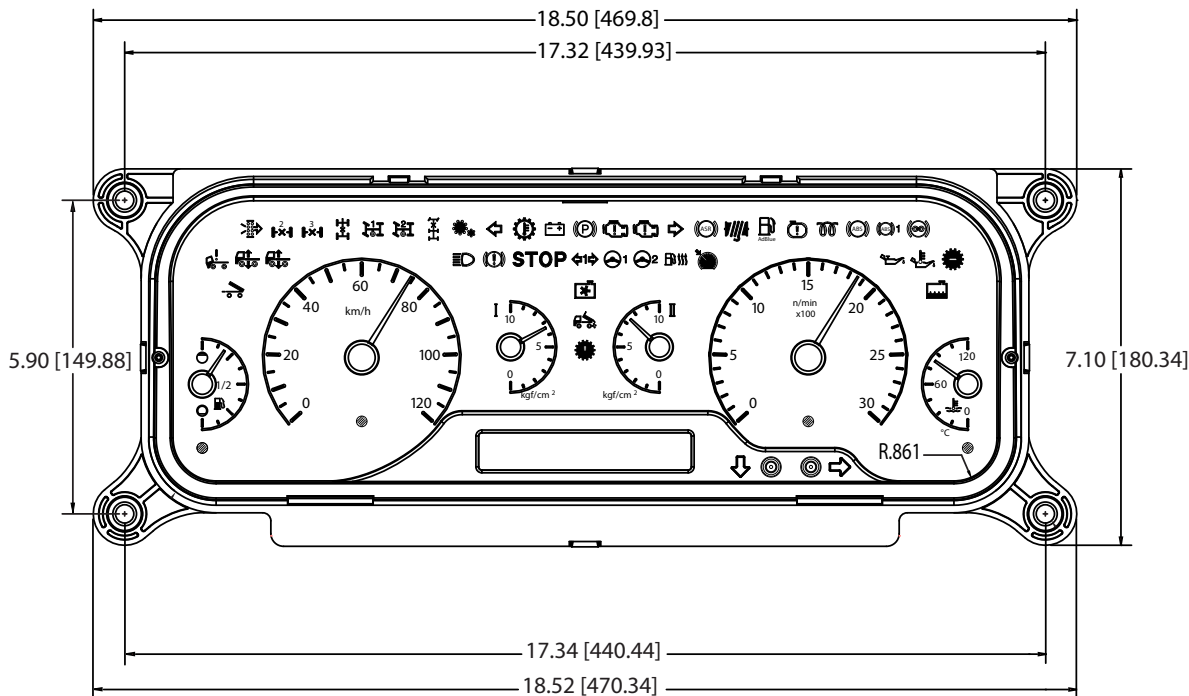
### Telltails

Number of symbols – 42, dead fronted  
 Symbol size – Approximately 0.4 inch square

### Message Center Display Characteristics

Type – Positive mode, liquid crystal dot matrix  
 Aperture size (inches) – 4.00W x 0.7H  
 Backlight color – Amber (590nm)  
 Number of lines; characters per line – 2 x 20  
 Character type – 5 x 7 dot matrix

## Installation Data



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