





# **OmniPlex**Multiplexing System

Get Connected.
Custom Control Exactly
the Way You Want It.



Equip your apparatus with the industry's most advanced, ultimate multiplexing system, the OmniPlex™ by FRC! Designed around specific use in emergency applications, the OmniPlex vehicle multiplexing system is extremely easy to use and customizable to your specific mission critical requirements.

OmniPlex delivers the most cost-effective and functional solution for fire apparatus and ambulance electrical wiring systems. OmniPlex creates ONE central point to CONNECT truck electrical systems and electrical components. This means streamlined installation by emergency apparatus OEMs and increased functionality by the operator. The system is engineered to integrate all apparatus electronic equipment which allows you to create custom controls unique to your critical requirements.

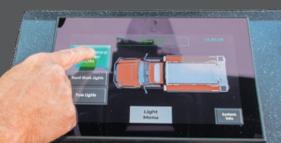
The OmniPlex system is comprised of the crisp, touch-screen S-Vision™ operator interface panels driven by the S-Core™ while ultra-high speed communication from connected components is delivered via the S-Node™(s). The robust and revolutionary design of S-Core and the S-Nodes makes OmniPlex the best, easiest to use, safest and most dependable multiplex system on the market!



## Powering the OmniPlex vehicle multiplexing system

OmniPlex is powered by SafeLink®, a state-of-the-art operating system designed with the safety of the first responders in mind. Similar to operating systems on your mobile devices, SafeLink connects other applications and provides the interface to hardware components including vehicle electronic systems and onboard components. Central data collection, telematics, and cloud storage are all realized via SafeLink.

With thousands of customizable options and unique control features, you can tailor the system to duplicate existing systems or design it to follow operation specific protocols and procedures. The open platform design means proprietary and non-proprietary components and equipment can be integrated via the OmniPlex vehicle multiplexing system. Best yet, SafeLink's intuitive nature simplifies installation, use and training!



## OmniPlex incorporates numerous features and benefits A DEEPER LEVEL OF CONTROL

#### **Customize your user experience**

- Dimming and automatic timer controls for lighting
- OEM programmable user interfaces
- Configurable warning messages
- Patient timers for EMS applications
- Configure device on/off delays
- User defined status indicators

#### **Display Flexibility**

- By incorporating multiple controls, the OmniPlex Hi-Resolution S-Vision touchscreen maximizes space inside the cab.
- Bright LCD is optically bonded to anti-glare glass for unmatched visibility.
- Simple to install with multiple mounting options.
- Operate the touch screen easily without having to remove safety gloves.

#### iNet® (Optional)

Local remote connectivity and access via any device that can run a web browser. OEMs can configure multiple screens for remote control.

The connectivity is via a built-in local Wi-Fi (no Internet). Up to four devices can be connected and operate SafeLink simultaneously.

#### Additionally:

- Use our S-Transfer™ utility to update the SafeLink modules
- Upload/download manuals and operation videos
- Access and download data logged files

#### **Open Platform**

Easily integrate both proprietary and non-proprietary equipment through the OmniPlex S-Core and S-Nodes.

#### **Increased Safety**

Easily programmable, OmniPlex integrates into a variety of backup and Safe Fleet camera systems.

#### **Streamlined Installation**

Reducing the number of wire connections compared to a hardwired system reduces installation time for the OEM.





The information displayed and appearance are completely customizable with OmniPlex. Display data as a digital readout or graphically with gauges or bar graphs. The system can be configured for any type of emergency vehicle.



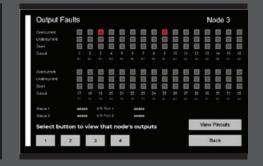
#### **Custom User Interface**

The user operational and diagnostic screens can be tailored to your specific needs. Mimic your existing user interface screen to maintain the current operational procedures, avoiding costly training. Customize the system to make sure critical real-time information is available at your fingertips, making operation easier and safer.



#### Tailored Data Logging/VDR

Customizable data logging and collection is a standard OmniPlex feature. Users can work with OEMs to decide what data they want to log. This can be the vehicle data, flow information, operating pressure, and other useful data. The data can be easily accessed by authorized personnel when needed.



#### **Operational Effectiveness**

OmniPlex collects operational data and stores it locally. OmniPlex can be easily diagnosed using the SafeLink service tool. The configurable event log makes repairs quicker which reduces vehicle down time. OmniPlex also allows service technicians to troubleshoot the vehicle in real-time via iNet.

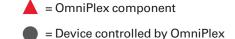
- 1. OMNIPLEX DISPLAY
- 2. SAFELINK PROGRAMMING SOFTWARE
- 3. S-CORE

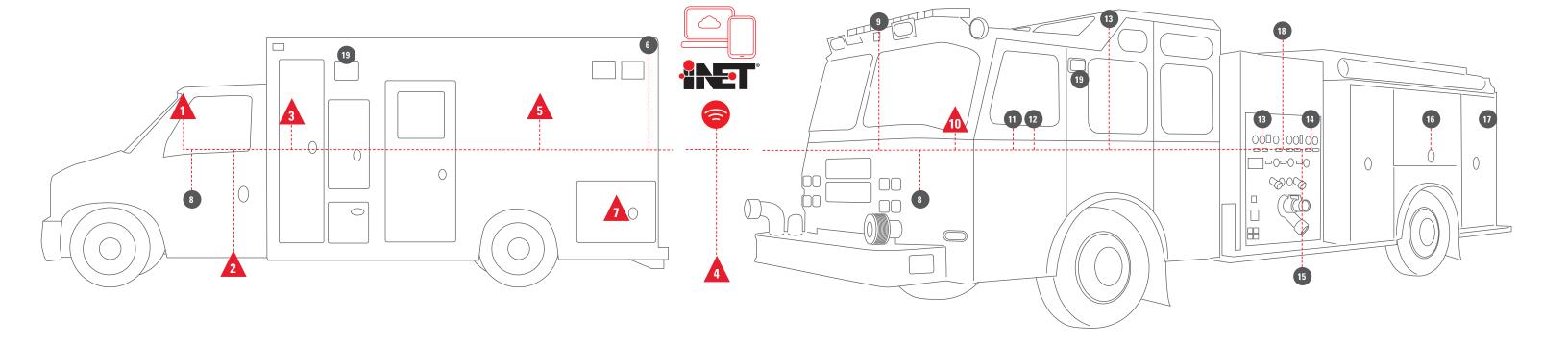
- 4. LOCAL WI-FI INTERFACE
- 5. DISPLAY PANEL
- 6. INTERIOR CAMERAS
- 7. S-NODE

- 8. ENGINE &TRANSMISSION
- 9. WARNING LIGHTS
- 10. CAB DISPLAY PANEL
- 11. CAB/DOORS/CLIMATE

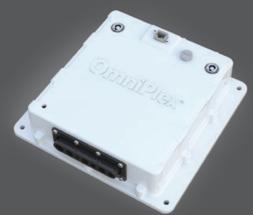
- 12. VDR
- 13. VALVES
- 14. GAUGES
- 15. WATER LEVEL

- 16. DOOR SWITCHES
- 17. EXTERIOR CAMERAS
- 18. CANBUS DEVICES
- 19. SCENE LIGHTING





### **OmniPlex Hardware**



#### **OMNIPLEX S-CORE**

The S-Core module is designed to drive S-Vision LCD screens. By locating the intelligence inside the S-Core, new LCD sizes and models can be quickly integrated.

- 4 Camera Feeds (add more with optional splitters)
- 4 CAN ports allow OmniPlex to be connected to:
- Engine and transmission
- Other electronic devices
- Screen layouts can be customized by the OEM
- External Communication Hub
- Show chassis and/or pumping system data



**OMNIPLEX S-NODE** 

The S-Node I/O ports allow for analog or digital signals to be read and sent to other devices on the system. These can be inputs from rocker switches or outputs to turn LED indicators on. CAN ports on the S-Node provides the interface between the chassis and other S-Node modules.

S-Nodes (inputs x outputs)

- **28** x 36 S-Node
- **8** x 16 S-Node

### **OMNIPLEX S-VISION™**

#### **Display Flexibility**

OmniPlex S-Vision displays are designed and manufactured with durability and ease of installation in mind. Provides you with crisp graphics and simple navigation for seamless operation, diagnostics, and data retrieval.

- **7** inch (178 mm) @ 800 x 480
- 10 inch (254 mm) @ 1280 x 800
- **12** inch (305 mm) @ 1280 x 800
- Toggle touch on or off
- Touch calibration
- Touch sensitivity control
- IP67 rated
- Near 180 degree viewing angle. Can be viewed from any directions.
- Bright, bonded display for optimal viewing in all conditions
- Bright sunlight readable (1000 NIT)
- Anti-Reflective / Anti-Fingerprint coating
- Multiple mounting options:
- Flush panel mount
- VESA mount (100 mm)

#### **Maximum Durability**

For use in the most extreme environments, all hardware is rated to IP67 with a wide temperature operating range from -40° F (-40° C) to 185° F (85° C).

#### **Diagnostics and Maintenance**

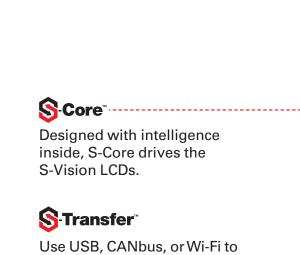
- OmniPlex has an internal data log that is very flexible, allowing the OEM to capture unlimited metrics and data from connected equipment
- Customize critical system maintenance reminders to ensure that the vehicle is operating at peak performance



The S-Node allows for all input and output







update the S-Core and S-Nodes

via the LCD screen or remotely.

signals to interface with other devices and the chassis. CAN ports are standard and provide access to connect additional devices. It also has the capability to function as a stand-alone module; without the S-Core.

SAFELINK

J1939

FRC-CAN

OTHER-CAN

OTHER-CAN

OTHER CAN

OTHER CAN

SIGNPUTS

S

**S**-Node<sup>™</sup>



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