

# Configurable Multifunction Display Products

*Taking Display Technologies to New Heights*



## AL530 Display

Mil-Std  
MS25212  
Compatible



Apogee Labs, Inc., offers a wide range of Configurable Multifunction Display Products for use in a variety of applications, including fixed-wing and rotary aircraft, ground-based pre-flight exercises, and combat vehicles. Our Displays provide users with a single location on the instrumentation panel to accomplish multiple functions. Moreover, these products are designed and manufactured to the most rigorous standards to ensure exceptional reliability, ease of use, and a display interface that offers superior clarity, color, and contrast.

The AL530 is a 6.5 inch user programmable LCD display that features a 10/100/1000 Ethernet interface capable of receiving, processing, and displaying data packets from multiple sources and is also capable of sending messages to control and update other devices. In addition to the Ethernet Interface the AL530 also features USB, RS-232 and a single discrete I/O ports that can be used to provide additional data display and control functions. The units can be switched between custom software and the Apogee Labs' Gauge Configuration Software Suite allowing the user to run software designed to perform specific functions that are unique to an application and still take advantage of the flexibility to quickly reconfigure the unit to display data that the integrated software suite provides.

### Select Features

- 6.5" diagonal User Programmable LCD Display
- Multiple pages per display
- Compatible with multi packetized data formats
- Dzus rail compatible – Mil-Std MS25212
- Wide separation of keys for operational control
- Ethernet, USB, RS-232 and discrete I/O
- Optional GUI software package
- Sunlight readable

### Select Specifications

#### INTERFACES

- 10/100/1000 Mbps Ethernet
- USB
- RS-232
- Analog Discrete

#### POWER

- 28 VDC @ < 1.0 Amps
- MIL-STD-704F

#### CONNECTORS

- J1 - MIL – 38999 Series N, Type 3, 20WD35SN
- J2 - MIL – 38999 Series N, Type 3, 20WA98PN

# Specifications

## ENVIRONMENTAL

The AL530 is designed to the following specifications:

Operating Temperature

-30°C to +75°C

Fluid Exposure

MIL-STD-810

Alcohol TT-I-735, Soap in Water, and Water Only.

Fungus

MIL-STD-810F by analysis

Humidity

MIL-STD-810F Humidity Method 507, Procedure I

Sand, Dust, and Volcanic Ash

Sand MIL-STD-810, Method 510.4, Procedure II

Dust MIL-STD-810, Method 510.4, Procedure I

## General

Resolution: 480(h) x 640(v) pixels (*Portrait orientation*)

Contrast Ratio: Typically 600, min 350

Luminance: > 900 Nits

Viewing Angle: 80°, 80°, 80°, 60°.

Rugged LED-based backlight

Day Mode - Sunlight Readable

Display control: selected by push buttons or remote interface

## EMI: MIL-STD-461E

CE102 Conducted Emissions, Power Leads, 10 kHz to 10 MHz

CS101 Conducted Susceptibility, Power Leads,  
30 Hz to 150 kHz

CS114 Conducted Susceptibility, Bulk Cable Injection,  
10 kHz to 200 MHz

CS115 Conducted Susceptibility, Bulk Cable Injection,  
Impulse Excitation

CS116 Conducted Susceptibility, Damped Sinusoidal  
Transients, 10 kHz to 100 MHz

CS118 Personnel Borne (ESD)

RE102 Radiated Emissions, Electric Field, 10 kHz to 18 GHz

RS103 Radiated Susceptibility, Electric Field,  
2 MHz to 40 GHz

RS103 Radiated Susceptibility, Electric Field, 2 MHz to 40 GHz

## Connectors

J2 -Power Input :MIL – 38999 Series N Type 3

Part # - 20WA98PN

J1 -Power Input :MIL – 38999 Series N Type 3

Part # - 20WD35SN

## Mechanical

MIL-Std MS25212 Compatible

