



LAND



SEA



AIR

SKY 12-P20

**RUGGED SMART DISPLAY WITH
20 PROGRAMMABLE FUNCTION KEYS**



POWER AUTOMATION COMPUTER

- 12" Glass-Film-Glass Touch panel
- 20 user Programmable function keys
- Heavy-duty fully IP65 Rugged aluminum chassis with MIL-DTL-38999 connectors
- 1300 ~ <1 nits , compatible with Sun light Readable and night vision goggles
- 1 x DVI, 1 x VGA, 1 x Audio, 2 x USB

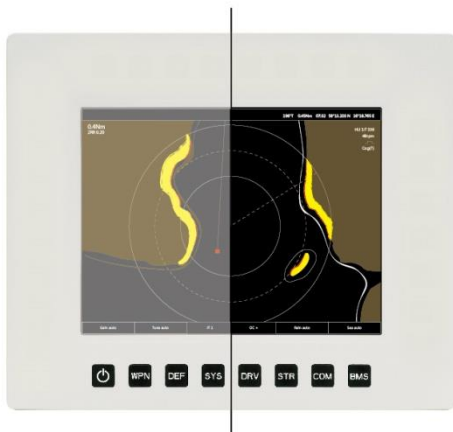


● Introduction

SKY12-P20 rugged smart display which are featuring brightness up to 1300 nits and night vision image system (NVIS) under 1% nits, bonding of protective glass (GFG), touch screens, **SKY12-P20** also provide optional feature such as EMI filtering / EMI mesh shielding, anti-reflection/anti-glare (AR/AG) coatings depend on customized requirement. 7 soft touch button /w programmable function keys, the rugged display also designed with IP-65 waterproof and dust proof all-aluminum housings, support extended operating temperature range from -40°C to 70°C and flexibly support MIL-STD 461/1275 power input range from 18V to 36V.

● Description of Key Features

(1) Sunlight Readable Up to 1300 nits



Normal TFT Sun Readable TFT

SKY12-P20 ruggedized smart display can support sunlight-readable to meet high ambient light conditions such as direct sunlight, it also adopt our excellent optic bonding technical process, when bonded together the light passes through the bonded layers and is absorbed somewhat into the screen. Optical bonding is therefore important in making screens sunlight readable.

(2) Night Vision Mode Support

When system at night mode, the operator can adjust brightness by hard key to turn it to darker, the display brightness down to under 1% nits or other customized night vision mode immediately, and the display gets ready at low brightness right away once its trigger and protect the usage of night vision devices at once.



(3) MIL-DTL 38999



MMIL-DTL-38999 is a high-performance cylindrical connector family designed to withstand the extreme shock, exposure and vibration that are commonplace in Defense

and aerospace applications. Made with removable crimp or fixed hermetic solder contacts, these connectors provide high-vibration characteristics and are suitable for severe wind and moisture problem areas

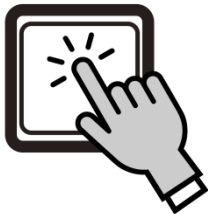


(4) G.F.G. Resistive Touch Screen

GFG touch screens are operable with fingers, pens and gloves. The glass surfaces makes the glass-film-glass sensor very durable and scratch resistant (7H).



(5) Soft Touch Buttons



SKY12-P20 equipped up to 3 ruggedized function keys, 3 OSD keys and 1 power button by rubber-tooling made, each key pad dimension at 16 x 16 mm even the operator access function keys with wearing MOPP levels gloves.

(6) IP65 Certified



SKY12-P20 has complete resistance to dust and water; which is ruggedized and reliable for constrained military, ground army and defense.

(7) MIL-STD 810G Compliance



SKY12-P20 compliances of MIL-STD-810 for shocks, vibration etc; **SKY12-P20** is rigorously field-tested to meet or exceed MIL-STD810G a for extremely high & low temp. humidity, shock, and vibration.

(8) MIL-461/1275 EMI Filter



SKY12-P20 is designed with MIL-STD-1275/704, protecting against vehicle/aircrafts voltage surges, spikes and transients, and even electromagnetic interference. This characteristic is well suited for the strictest military requirement and deliver optimal performance in harsh conditions.

Specifications

SYSTEM

LCD Panel	12" TFT LCD
Resolution	1024x768 XGA
Aspect Ratio	4:3
Brightness	1300 nits
Response Time	5 ms (TYP.)
Contrast Ratio	700 (TYP.)
Touch Panel	Glass-Film-Glass 5-Wire resistor touch panel
Function key	20 user programmable function keys
Display Contro	<ul style="list-style-type: none">• Power On/Off• LCD Brightness +/-• Function key backlight On/Off• Display mode Select (On/Off/Night Vision)

POWER

Power Input	18V~36V DC-IN Optional: 12V~40V DC-IN (150W max) MIL-STD-461, MIL-STD-1275, MIL-STD-704 compliant power supply
EMI Filter	Vicor MF028AMFPT (MIL-COTS Filter), compliant with MIL-STD-461, MILSTD-1275, MIL-STD-704, MIL-STD-810 and EN 60950-1.
PRM® Regulator	Vicor MP028F036M12AL (MIL-COTS Regulator), compliant with MIL-STD-1275, MIL-STD-704 and EN 60950-1.
VTM® Current Multiplier	Vicor MVTM36BT030M040B00 (MIL-COTS current multipliers), Overvoltage, Overcurrent, Short Circuit and OverTemperature protection.

CONNECTORS

DC-IN	1
X1	VGA + Audio
X3	USB x 2

APPLICATIONS

Applications	Commercial and Military Platforms Requiring Compliance to MIL-STD-810G Embedded Computing, Process Control, Intelligent Automation and manufacturing applications where Harsh Temperature, Shock, Vibration, Altitude, Dust and EMI Conditions. Used in all aspects of the military.
Operating System	Windows: Windows 8 32/64 bit, Windows 10 32/64bit Linux: Fedora 20, Ubyntu 13.10, Ubuntu 14.04

PHYSICAL

Dimension (W x D x H)	370 x 59 x 310mm
Weight	11.7 kg (25.8 lb)
Chassis	Aluminum Alloy, Corrosion Resistant.
Finish	Anodic aluminum oxide (Color Olive green)
Connectors	DVI, VGA + Audio : Amphenol TV07RW-13-35S USB: Amphenol TV07RW-13-98S DC-IN: Amphenol TV06RW-11-54S
Ingress Protection	IP65 Dust /water Proof

ENVIRONMENTAL QUALIFICATIONS

MIL-STD-810G Compliant	Method 507.5, Procedure II (Temperature & Humidity) Method 516.6 Shock-Procedure V Non-Operating (Mechanical Shock) Method 516.6 Shock-Procedure I Operating (Mechanical Shock) Method 514.6 Vibration Category 24/Non-Operating (Category 20 & 24, Vibration) Method 514.6 Vibration Category 20/Operating (Category 20 & 24, Vibration) Method 501.5, Procedure I (Storage/High Temperature) Method 501.5, Procedure II (Operation/High Temperature) Method 502.5, Procedure I (Storage/Low Temperature) Method 502.5, Procedure II (Operation/Low Temperature) Method 503.5, Procedure I (Temperature shock)
Reliability	No Moving Parts; Passive Cooling. Designed & Manufactured using ISO 9001/2000 Certified Quality Program
EMI/EMC	CE ,FCC , MIL-STD-810G, MIL-STD-1275, MIL-SD-461E compliance
Green Product	RoHS, WEEE compliance

Ordering Information

SKY12 -P20

12" Rugged Smart Display with MIL-DTL-38999 connectors,
20 user programmable function keys, Night Vision
supported

Dimension

