

# SANDEL®

## SN4500 4/5-ATI High-Definition Primary Navigation Display



Sandel Avionics

## A TECHNOLOGY INFUSION WITH MODULAR CONVENIENCE



Sandel SN4500 in Map mode



Sandel SN4500 in 360° Compass mode

Offering modular convenience and flexibility, Sandel's SN4500 High-Definition Primary Navigation Display is the new standard in NAV displays. Incorporating patented LED backlight technology, the SN4500 is the ideal replacement for aging 4-in. and 5-in. electromechanical HSIs, to give your cockpit unmatched resolution, unbelievable color and a state-of-the-art technology update.

Featuring an ultra-wide viewing angle (180 degrees in both the horizontal and vertical axes), the SN4500 also boasts an MTBF in excess of 10,000 hours. And with Sandel's patented display engine generating a resolution of 200 pixels per inch — unmatched in the industry for brightness clarity, readability and color fidelity — you'll find the SN4500 transforms your panel as it gives you a better view of the airspace around you.

### INNOVATION AND EXPERIENCE

Drawing from our experience with thousands of compact integrated displays in service, we designed the SN4500 to do what nothing else can: Replace your electromechanical HSI with a modular electronic display.

This allows you to achieve maximum performance at minimum disruption to your aircraft. And by saving on both acquisition and installation costs, the SN4500 is a cost-effective way to enhance both the operational and the residual value of your aircraft or fleet. Reliable, affordable and backed by Sandel's award-winning product support, the SN4500 is ideal for corporate and air transport aircraft.



### A NEW LOOK IN NAV

The SN4500 improves situational awareness by presenting Compass, Map, Flight Plan and safety systems data in a bright, high-resolution format. FAA-certified as a primary navigation display, the SN4500 even incorporates overlaid weather, along with traffic information from TCAS, TCAD and TAS receivers, to maximize situational awareness.



### UNMATCHED FLEXIBILITY

It also incorporates our revolutionary Smart I/O, which automatically accepts input from analog and digital aircraft systems, streamlining installation and reducing costs.

### KEY FUNCTIONS AND FEATURES

- Bright, sunlight-readable, high-definition LED-backlit display with 200-pixel-per-inch resolution — twice that of conventional liquid crystal or CRT screens
- Patented LED backlight technology for high reliability and long life
- Displays vertical deviation from WAAS-enabled GPS receivers
- Ultra-wide left-to-right/up-down viewing angle
- Full-color moving map supporting GPS- or FMS-supplied waypoints, heading, bearing pointers for VOR and ADF, DME display and marker beacons
- Upgradable system combines navigation with TCAS and datalink weather
- Internal Jeppesen NavData™ database supplements IFR flight plan data and approach waypoints derived from your GPS receiver's IFR-approved database
- One-touch toggle between 360-degree compass and 70-degree ARC view
- HDG and CRS sync functions automatically set the heading bug directly to your current heading, or the course pointer to a VOR station
- Graphical bearing pointers and digital bearings supplied for any selected navigation source
- Auto-slew function simplifies waypoint sequencing
- Supports remote heading and course knobs
- One-touch declutter for each display item
- Approved for use as a primary navigation display
- Designed for turbine-powered fixed-wing aircraft and helicopters
- Compatible with 4-in. and 5-in. instrument panels

**SANDEL®**  
Sandel Avionics/Simply Brilliant

## SN4500 SPECIFICATIONS

### Weight

SN4500:  
Bracket & Connectors

3.5 lb. (1.59 kg)  
0.5 lb. (0.23 kg)

### Dimensions

Length (with bezel): 9.60 in (24.384 cm)  
9.27 in (23.546 cm) from panel to back of unit  
Body: 3.970 in x 3.970 in (10.084 cm x 10.084 cm)  
Bezel: 4.060 in x 4.060 in (10.312 cm x 10.312 cm)

### Power Requirements

22-33 VDC  
28 VDC @ 1.4A nominal (40W)

### Cooling Requirements

Internal fan requiring ambient air at fan input

### Mounting

Standard 4-ATI panel cutout with clamp and Positronic® connectors  
Bezel adapters available for mounting in 4x5 and 5x5 panel cutouts

### Operating Environment

-20° C. to +70° C. (-50° C. on special order)  
+55,000 ft. max altitude

### Certification Basis

TSO C113, Airborne Multipurpose Electronic Displays, and TSO C6d,  
C34e, C35d, C36e, C40c, C41d, C118  
DO-160E Env. Cat. [(A2)(F1)Z]BAB[HR]XXXXXXZBABBC[WW]M[XXE2F2X]XXAX  
DO-178B, Software Level C  
DO-254, Hardware Level C

### Interfaces

Heading:

Bi-phase stepper (Mid-Continent 4305 & KG102)  
XYZ synchro (ARINC 407)  
ARINC 429

Flux Gate:

400-Hz XYZ 3-wire interface with external excitation (if required)

NAV:

Analog and ARINC 429

DME:

2 King serial or ARINC 568 digital (e.g. DME40)  
1 Analog DME input (40 mV/nm)

ADF:

SIN/COS, Synchro and ARINC 429

GPS:

ARINC 429, RS-232 and RS-422

Composite NAV:

2 ARINC 0.5V inputs, Internal NAV Converter

Marker Beacons:

3 discrete inputs

Switch/Annunciators:

Discrete and ARINC 429

Lightning Detection:

WX-500 Stormscope®

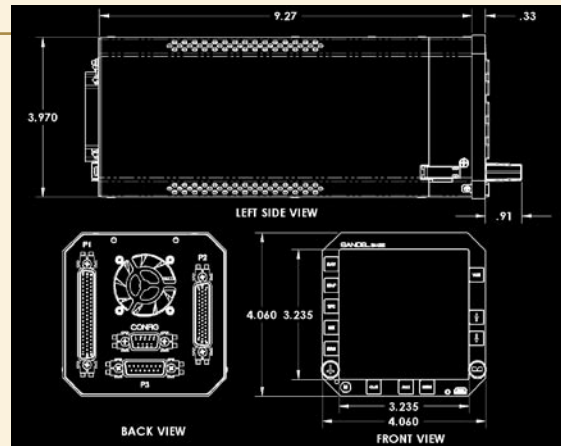
Traffic (option):

ARINC 429 (TAS, TCAD, TCAS I and TCAS II)

Weather (option):

RS-232 datalink weather

Specifications subject to change without notice.



1.760.727.4900 [www.sandel.com](http://www.sandel.com)

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