GNS-XLs Enhanced
Global Flight Management System
The GNS-XLS Enhanced: New Levels Of Capability

A compact, low cost FMS combining GPS approach technology with graphical weather and EGPWS display capability. — The new GNS-XLS Enhanced offers performance, flexibility and value in a single integrated unit.

Derived from the GNS-X, the industry’s most popular navigation management system, the GNS-XLS Enhanced Flight Management System represents a natural evolutionary step in a low cost FMS. With a built-in GPS receiver, the GNS-XLS Enhanced provides en route, terminal and non-precision approach navigation capability. It also offers text and graphical weather through our exclusive AFIS® Airborne Flight Information Service.

The GNS-XLS has the capacity to blend position data from a full complement of other navigation sensors, ensuring navigation availability, accuracy and reliability.

Major functions include advanced search patterns for search and rescue operations, flight planning, flight plan storage, fuel management and COMM, NAV, ADF and transponder radio tuning, with 8.33 MHz support.

WORLD-CLASS PERFORMANCE...

Providing easy-to-use great circle navigation, the GNS-XLS Enhanced combines sensor input with internal database information to calculate “Direct-To” paths. It can follow a predetermined flight plan or track a route programmed in flight, while its vertical navigation feature even allows you to fly VNAV flight paths.

Information is displayed to the flight crew on a full color, 4-inch flat-panel liquid crystal display (LCD). The GNS-XLS Enhanced features internal analog and digital interfaces, and either a standard or typewriter-style keyboard with line select keys for fast, efficient data entry.

...WITH BUILT-IN GPS

With its internal eight-channel GPS receiver, the GNS-XLS can continuously acquire and track signals from as many as eight Global Positioning Systems satellites. For greater reliability, the GNS-XLS Enhanced features fault detection and exclusion (FDE) for oceanic and remote area operations and receiver autonomous integrity monitoring (RAIM).
PLANNING AHEAD
The GNS-Xls Enhanced automates the functions of area navigation (RNAV). It also provides B-RNAV and RNP-10 (Required Navigation Performance) capability for world-wide flight planning.

With an easy-to-use reference and coupled VNAV capability, vertical portions of a flight plan can be built in advance, with altitude constraints, offsets and flight path angles programmed to vertical waypoints. By preprogramming a cruise altitude, the system automatically projects a top-of-climb and top-of-descent, reducing pilot workload; a Vertical Direct-To feature makes vertical profile changes fast and easy.

CONVENIENCE AND SAVINGS
Amazingly compact, the GNS-Xls Enhanced incorporates its own database card reader. Allowing you to perform database updates more easily and quickly, eliminating the need for a separate data transfer unit.

The system’s four-channel auto fuel flow feature provides the crew with access to such information as fuel remaining, fuel consumed, gross weight and individual engine fuel consumption, to help determine your optimum range and fuel requirements. Combine Area Navigation (RNAV) and direct routing with Vertical Navigation (VNAV) operation and the GNS-Xls Enhanced will literally pay for itself over time.

GNS-Xls Enhanced lateral and vertical navigation functions

- Greenwich date and mean time
- Present position coordinates
- Magnetic variation
- Stored waypoint coordinates
- Stored flight plans
- Departure time/time over last waypoint
- Bearing and distance to waypoint
- Estimated time to waypoint
- Estimated time of arrival (ETA)
- Wind direction and speed
- Desired track
- Drift angle
- Ground speed
- Track angle error
- Crosstrack distance
- Vertical deviation
- Range-and time-to-altitude profile point
- Estimated crossing altitudes
- Target altitude rate

For special missions, the GNS-Xls Enhanced offers the added configuration capability for Maritime Surveillance Programming. This allows the use of distinct search patterns, along with a newly implemented break-and-resume capability.

The GNS-Xls Enhanced is the ideal platform with our exclusive AFIS Airborne Flight Information Service. AFIS brings real-time data link communications and graphical weather to the flight deck.
Global customer support

Honeywell’s avionics are based on proven technology providing exceptionally high reliability and simplified maintenance.

To help ensure optimal operation conditions, Honeywell provides comprehensive installation consultation and support tailored to the unique needs of each operator. Additionally, our product support services include regularly scheduled maintenance and pilot training courses and support documentation. When service is needed, our customer engineers and service centers are strategically located around the world to provide efficient, responsive support. Honeywell remains unsurpassed in the scope and variety of services, which range from SPEX exchange of line replaceable units to personalized service contracts designed to fit the resources and circumstances of every operation regardless of size or business nature.

GNS-Xls Enhanced specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>TSO:</td>
<td>C 115a, C129 A1/B1/C1</td>
</tr>
<tr>
<td>Environmental:</td>
<td>RTCA DO-160C (DIFI) VBA-(MNB)</td>
</tr>
<tr>
<td></td>
<td>E1XXXXXXXXZAZAXZKXXX</td>
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<tr>
<td>Height:</td>
<td>4.5 in. (11.430 cm)</td>
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<tr>
<td>Width:</td>
<td>5.75 in. (14.605 cm)</td>
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<tr>
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<tr>
<td>Depth w/connector:</td>
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<tr>
<td>Weight:</td>
<td>7.0 lbs. (3.18 kg)</td>
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<td>Power Requirements:</td>
<td>18-32VDC, 27.5W nominal; 1.6A nominal, 3.6A max.</td>
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<tr>
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<td>26VAC, 400 Hz AC Reference, 3.0VA max.</td>
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