

4 CHANNELS WITH VOICE, FAX AND
ACARS ALL IN ONE UNIT

INTERFACES WITH OTHER AERONAUTICAL
EQUIPMENT AS NEEDED

DEDICATED SBD MODEM

INTERFACES WITH BOTH ANALOG
AND DIGITAL SATCOMS

AUTOMATIC GAIN CONTROL (AGC)



ICG NXTLINK SERIES ICS-400

IRIDIUM TRANSCEIVER

The ICG NextLink Series ICS-400 Iridium Communications System incorporates four Iridium transceivers with an internal CTU, providing a standalone comprehensive communications system with connectivity to other aircraft systems. The ICS-400 permits connections of conventional telephony devices or legacy CTU systems through either standard 2-Wire "Tip and Ring" circuits, 4-Wire audio connections or via CEPT-E1 digital circuits. CTU features include intercom calling, call transfer, conferencing, follow-on dialing and voice prompts. Designed into a 4 MCU Line Replaceable Unit (LRU), the device can be installed on any size of aircraft as the sole communications facility or as an additional/restorative communications system. The ICS-400 also provides ARINC 429 connections and a dedicated Short Burst Data (SBD) modem for ACARS services. The device is simple to operate offering standard dialing conventions and PABX operations with familiar call progress tones. It is the ideal solution for aircraft requiring up to 10 telephony connections and seamless global communications services without the inconveniences of hand-offs or no-service areas.



ICG NXTLINK SERIES ICS-400 SPECIFICATIONS

FEATURES

- Four channels of global voice and data
- Dedicated ACARS/AFIS services
- AFF via DMU or internal GPS
- 2400 BPS data or 10 KBPS with compression
- Channel bonding for higher data rates
- Call management functions
- Secure voice via STE devices
- Credit card calling services
- Internal fax support for fax over Iridium
- Call alerter signals and custom indicators
- Digital echo cancellation

CIRCUITS

- (8 Ea.) 2-Wire Telco subscriber circuits
- (2 Ea.) 4-Wire audio circuits with discreet hook status and incoming ring signals
- (2 Ea.) 2-Wire CO circuits
- (2 Ea.) CEPT-E1 circuits
- (2 Ea.) ARINC 429 circuits
- (1 Ea.) Ethernet connection
- (4 Ea.) RS-232 serial ports
- (1 Ea.) I/O discrete circuits

OPTIONS

- Internal fax module for fax over Iridium
- FNBDT Type-1 Encryption (NSA Top Secret or commercial encryption)
- ACARS option
- Internal CEPT-E1

ACARS SERVICES

- ARINC618 standard messaging via ARINC429H/L speed circuits
- Compatible with most popular DMU's, RIU's and MCDUs
- Supports all common ACARS messaging
- Supports safety services once Iridium network certified
- Supports weather graphics, flight following
- ARINC 741 compliant

SPECIFICATIONS

Chassis: (L x W x H)

Standard 2MCU rack
15.68 in x 5.04 in x 7.6 in
(39.83 cm x 12.8 cm x 19.3 cm)

Weight: (4MCU Rack) 10.5 pounds (4.78 Kg)

Weight: (4MCU Tray) 2.00 pounds (.909 Kg)

Prime Power: 28-volt DC

Power Consumption: 3 Amps @ 28-volt DC

LRU Connector: ARINC 600 Size 2

Temperature: -55°C to +70°C storage,
-40°C to +55°C operating

Altitude: 55,000 ft.

Vibration: S2

Models: PN # 400000-0-000 Base System
PN # 400000-0-001 with CEPT-E1
PN # 400000-0-010 with ACARS
PN # 400000-0-011 with ACARS/CEPT-E1

Certifications: DO-160E compliance
DO-178 Level D compliant

ENHANCED TELEPHONY FEATURES

Call hold and call transfer – simple hook flashes can place inbound, outbound or intercom calls on hold or transfer the call

Three-party Conferencing – the ICS-400 system provides basic three-party conferencing capability that permits a conference between two onboard callers and a ground party or two ground parties to a single onboard party

Audio Level Adjustments – the ICS-400 offers facilities to provide up to 20 db of gain or attenuation per extension or through the Iridium channel, to optimize voice quality in noisy cabins or to accommodate various types of handsets

Intercom Calling – internal calling is provided to permit calling to all extensions onboard and to provide conferencing of extensions within the aircraft

Digital Echo Suppression for 2-Wire telephone circuits

Interface with the Magnastar® AIU device to permit Iridium calls via Mach1® Handsets

Programmable audio and interface parameters to permit connections of non-standard systems and devices

INNOVATIVE COMMUNICATIONS. SUPERIOR TECHNOLOGY.

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