Eirtech Aviation
CPDLC & ACARS Solution

By 5th February 2020 all aircraft operating at or above FL285 must be equipped with a compliant system to meet the Euro control Link 2000+ mandate. Eirtech Aviation Services provide the easiest and most cost effective way to satisfy the mandate, with the added benefit of ACARS if required.

✓ **CPDLC**
(Controller Pilot Data Link
Communications) addresses the
capacity limits of voice communication
in designated European air space. This
is accomplished by providing controller
and pilots an air/ground data link.

✓ **ACARS**
(Aircraft Communication Addressing
and Reporting System) facilitates
communication between the flight
crew and ground-based operations in
all phases of flight.

✓ CPDLC addresses the capacity limits of voice communications in designated European airspace, providing controller and pilots an air / ground data link.

✓ ACARS facilitates communication between flight crew and ground based operations, in all phases of flight.

✓ CPDLC & ACARS in one box saves cost and installation space.

✓ One box means easy installation and reduced complexity.

✓ 3rd VHF transceiver built into the box, saving additional cost of extra VHF data transmitter.

✓ DLink+ CPDLC; all in one CMU, CDU & VDR.

✓ Eirtech solutions in stock for delivery, reducing lead times and inventory costs.

BOEING:

Boeing 737 Classic

Boeing 737 NG

Boeing 757

Boeing 767

AIRBUS:

Airbus 318

Airbus 319

Airbus 320

Airbus 321

Airbus 330

Specification	Dlink+	Dlink+ w/CPDLC
DZUS Mount	5.8"w x 4.5"h x 8.7"d	5.8"w x 4.5"h x 8.7"d
Weight	6 Pounds	6 Pounds
Power	Nominal 28 VDC (18–32 VDC Range) 30 Watts Typical 150 Watts Max (Transmit < 1sec)	Nominal 28 VDC (20.5–32.2 VDC Range) 25 Watts Typical 160 Watts Max (Transmit < 1sec)
Temperature	Operating -15° to +55°C Short-term Operating -15° to +70°C Survival -55° to +85°C	Operating -15° to +55°C Short-term Operating -40° to +70°C Survival -55° to +85°C
Environmental	RTCA DO-160D	RTCA DO-160E
Software	RTCA DO-178B Level D	RTCA DO-178B Level C
Complex Hardware	RTCA DO-254 Level D	RTCA DO-254 Level C
TSO	FAA TSO-C113	FAA TSO-C113, TSO-C160
VHF RADIO	VDL Mode A/2 Data Only	VDL Mode A/2 Data Only

Specification	Dlink+	Dlink+ w/CPDLC
INPUTS		
ARINC 429 Receivers	5	8
RS-232 Receivers	2	-
RS-422 Receiver	1	-
Discrete	8	8
OUTPUTS		
ARINC 429 Transmitters	2	4
RS-232 Transmitters	2	-
RS-422 Transmitter	1	-
Discrete	4	4
MICROPROCESSORS		
Motorola MPC860EN	39MHz	39MHz
Memory	16MB Flash, 8MB SDRAM on Each Microprocessor-based PCA	16MB Flash, 8MB SDRAM on Each Microprocessor-based PCA
DSP	TI TMS320VC5410A	TI TMS320VC5410A
Memory	On Chip 64K Words RAM	On Chip 64K Words RAM

✓ Prior to installing the DLINK+ w/CPDLC Unit, we will conduct a survey to ensure the project creates minimum operational impact. During this phase we can ascertain which units are necessary to relocate to make way for the DLINK+ w/CPDLC Unit.

✓ The DLINK+ w/CPDLC Unit can be installed on the left or right hand side in the centre pedestal according to customer selection. Crew access and usability is optimal from either seat and is fully compliant with the relevant sections of EASA CS25.

✓ Illustrated here is one of our proposed locations for the DLINK+ w/CPDLC Unit. It can be fitted in the mirror image on the first officer's side. The Weather Radar control panel (3SQ) and lighting control panel (117VU) have been placed behind the Speed Brake Handle panel.

✓ These alternative locations are still easily accessible by the crew and will not have any adverse effects on operational procedures. From an ergonomic view, having a single system unit on one side only is no different to the ATC and Weather Radar panels of which there are only single control interfaces fitted.

Removed units new position, behind speed brake control.

✓ The addition of the DLINK+ w/CPDLC Unit will benefit in more ways than one. As it is also a stand alone ACARS with it's own integrated VHF radio, you no longer require the following LRU's; ATSU,ACARS MU or VHF 3 Transceiver. The DLINK+ w/CPDLC Unit will utilise the existing VHF antenna and interface with the other Avionics systems via ARINC 429 data busses to obtain and provide all the information for seamless operation.

✓ The wiring required for the system integration is routed along the existing routes in the aircraft and can be installed during a base maintenance visit or over a short series of night stops.

A simple illuminated annunciator in front of each crew member will alert them to any incoming messages.
These will remain illuminated until the message has been actioned and acknowledged ensuring real time co-operation between air crews and ground stations.

✓ If you have an on-board data loader similar to the unit pictured, we can position this out of the way but still readily accessible to maintenance crews for software loading etc. The DLINK+ w/CPDLC Unit has a standalone ethernet port to enable configuration and updating as time goes by.
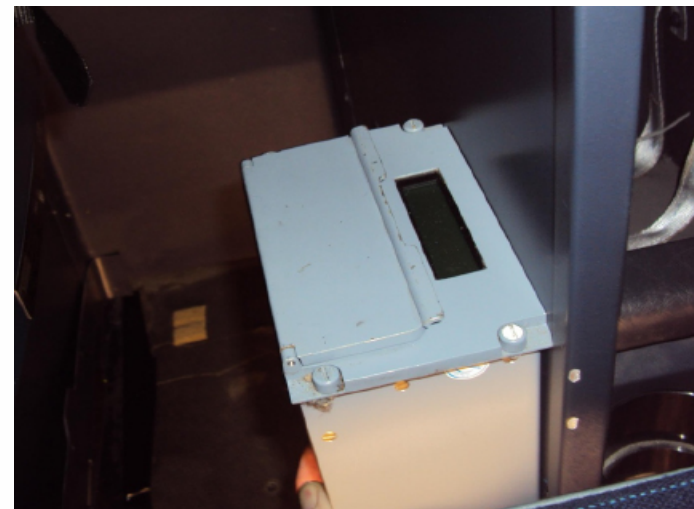
✓ Ease of Installation

✓ Greater operational capability

✓ Weight Saving

✓ Future proof and upgradeable

✓ OEM quality installation

✓ Cost effective solution

Eirtech Aviation is a world leading specialist aviation services company.
We work with international Airlines, Private Operators and Aviation Leasing Companies across the globe.

EASA Design Organisation
EASA 21J.452

GCAA Approved Design Organisation DOA/126

EASA Production Organisation
IE.21G.0002

EASA CAMO Part M (G&I)
IE.MG.113

Engineering Services

Design

Parts
Manufacturing

Materials

Asset Management

CAMO

Technical
Services

Aircraft Refinishing

Aircraft Painting

Interiors

Graphics

Composites

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