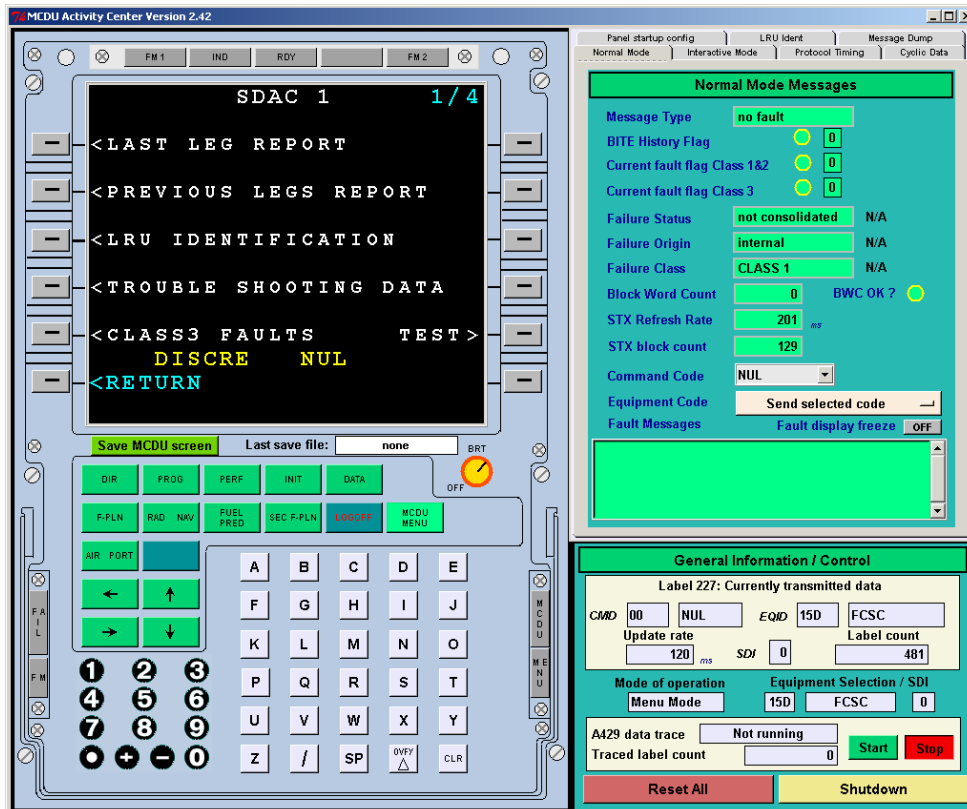




CMC3XX

CFDS/OMS Simulation Package for Airbus A31X/A32X and A330/A340



- CFDS/OMS simulation according to ABD0018/48/100
- Flexible configuration
- Accurate simulation of the ARINC 429 data traffic
- Protocol analysis and recording
- Scripting interface





CMC3XX

CFDS/OMS Simulation Package for Airbus A31X/A32X and A330/A340

Application Scope

The **CMC3XX** simulation package combines the Centralized Fault Display System (CFDS) and the Onboard Maintenance System (OMS) according to ABD0018 and ABD0048/100, respectively. The CMC3XX simulation supports only standard A LRUs of type 1.

In combination with one of TechSAT's A429-USB devices, the CMC3XX simulation package provides a powerful and cost-saving solution, which is ideal for the development, diagnosis, and maintenance of components with CMCS interface. The application can be run standalone on Windows®.

The simulation includes the following LRU communication functions:

- > Transfer of cyclic data to LRU
- > Display of cyclic LRU data on MCDU screen (= normal mode)
- > Handshake with LRU and display of LRU pages on MCDU screen (= interactive mode)

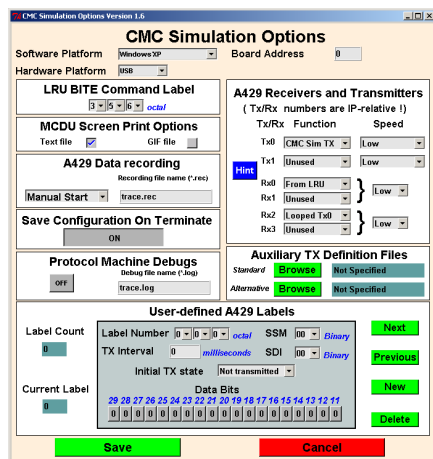
In addition to these main functions the software also contains some special features:

- > Protocol timing analysis and display
- > Protocol verification including block word count and record sequence number
- > Protocol error stimulation
- > Scripting interface

GUI Overview

A brief overview of the various control and display panels contained in the MCDU Activity Center main window follows below.

MCDU Activity Center - This three-pane window (see front page) is the container window of the CMC3XX simulation system. The left panel is a one-to-one copy of a real-world



MCDU panel.

The top panel to the right changes according to which tab button was clicked last. By default, the Normal Mode panel is displayed. The bottom section contains the General Information/Control

panel, which provides displays for the Operation Mode and the Equipment ID as well as controls to start and stop ARINC 429 data logging, reset the displays of the various panels, and terminate the simulation.

Normal Mode panel - Contains scrollable history of fault messages. Detailed error information is provided for the last fault message in the upper half of the panel. The panel also contains list boxes to change the Command Code and the Equipment Code.

Cyclic Data panel - Displays the most recent updates of the cyclic data sent from the CFDS/OMS to the LRU, including date, UTC, Flight No., City Pair, etc. The panel also provides buttons to bring up configuration windows allowing the operator to enter or modify the data to be transmitted. An automatic flight leg change (flight phases 1 - 10) is available as an option.

Protocol Timing panel - Displays the handshake response times of the CFDS/OMS and the LRU in milliseconds. There are two block word counts used to monitor if message transmission and reception are congruent. LEDs, initially set to RED, turn GREEN if communication is successful. They stay RED if there are errors.

Interactive Mode panel - Used to set and define:

- > Protocol characteristics for protocol error stimulation
- > Equipment Identification
- > Protocol timeout tolerances for CFDS/OMS transmissions

Message Dump panel - Used to create a dump of the last message. The data is displayed in binary and ASCII (ISO5) including a timestamp.

LRU Ident(ification) panel - Displays the Equipment Identification and special LRU identification messages sent by the connected system.

Technical Data

Hardware Requirements

- ARINC 429 interface - available options:
 - A429-USB-NT 2Tx/4Rx (PN 403557)
 - A429-USB-NT 4Tx/8Rx (PN 403568)

Operating System Options

- Windows® 10 64 bit

Part Number

- 202004