



# ACRA KAM-500

CONTROL

# ARI/103

Single-channel ARINC-573 bus monitor



## FEATURES

- Decommutates one ARINC-573 channel
- Coherently PARSEs traffic and tags for each major frame
- Supports a frame counter
- Detects Sync and Bit errors

## APPLICATIONS

- Monitoring of ARINC-573 DFDR bus

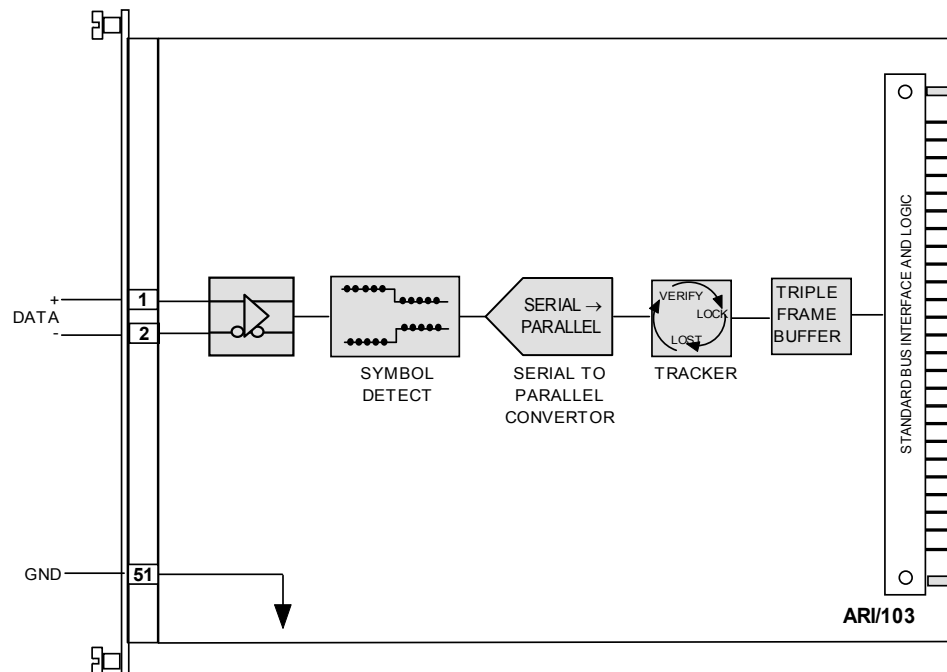
## DESCRIPTION

The ARI/103 is an ARINC-573 bus monitor that supports parsing of an ARINC-573(DFDR) bus on a major frame level and error detection function on a single module.

In the discussion below “traffic” refers to words on the bus and “tag” refers to associated information such as info words.

The parser triple buffers up to 2048 12-bit words (4 “sub-frames”) and their associated tags as a frame. The status word that is buffered with each major frame indicates whether the frame has been read before (STALE) or whether the message was overwritten before it was read (SKIPPED), or whether the message has never been received (EMPTY), as well as an error code.

A valid frame is detected when all four sub frame sync words are received, each followed by 63, 127, 255, or 511 data words.



Internal block diagram for ARI/103 module

## Selection guide and ordering information

### Selection Paths

Airborne Data Acquisition → KAM-500 → Modules → Bus → ARINC

### Ordering Information

Part Number	Mating Connector	Description
KAD/ARI/103	CON/KAD/002/CP	ARI/103 module with 52-way double density module top connector
KAM/ARI/103	ACC/CON/008/04	ARI/103 module with 51-way micro-miniature module top connector

By default, the standard mating connector above is included with each module in the shipment. Its part number will be added to the Confirmation of Order unless an alternative option is specified (see the *Cables* data sheet).

### Revision History

Revision	Differences	Status
ARI/103	First release	Recommended for new programs

In this data sheet ARI/103 refers to both the KAD and KAM version of the module.

### Related Products

Module	Details
KSM-500	This module is supported by the KSM-500 suite of software tools

### Related Documentation

Document	Details
DOC/MAN/018	KSM-500 Databook
DOC/HBK/002	Environmental Qualification Handbook
DOC/DBK/001	KAM-500 Databook