

# KAM/CHS/04L

Acra KAM-500 chassis, narrow form - 4 user-slots

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## Overview

The KAM/CHS/04L is a compact four user-slot Acra KAM-500 chassis, which along with the housing and backplane, includes a KAM/PSU/006 power supply unit.

The backplane has four slots for user-modules, which are polarized to prevent the insertion of the backplane controller module. The backplane has power supply lines and the standard 16-bit address/data bus with read/write control lines. The only ICs on the backplane are demultiplexers for user-module select signal.

The KAM/CHS/04L does not contain any  $\pm 7V$  lines for excitation.

## Key Features

- Power supply unit and four user-slots
- 18 to 40VDC isolated power supply
- Rugged aluminum housing
- 8MHz x 16-bit digital backplane
- Operates as master or slave in distributed system

## Applications

- Flight test instrumentation systems

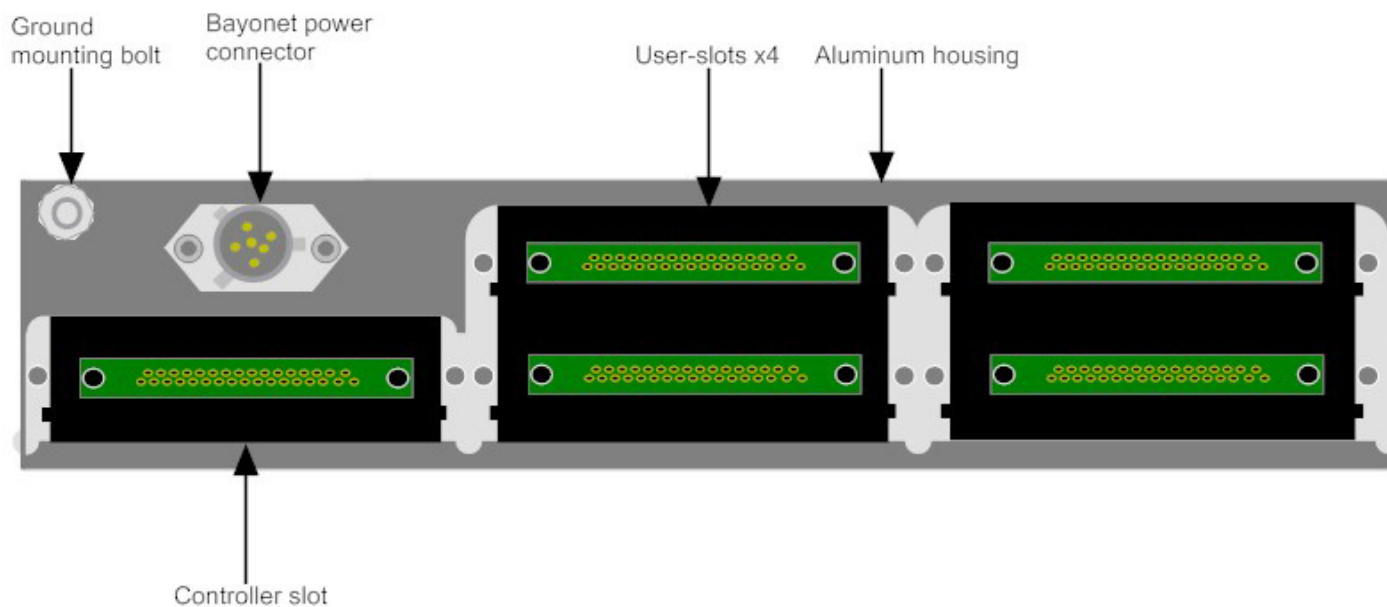


Figure 1: KAM/CHS/04L with PSU and four user-slots

## Specifications

TABLE 1		Mechanical specifications				
PARAMETER	MIN.	TYP.	MAX.	UNITS	CONDITION/DETAILS	
User slots	–	–	4	–		
Dimensions					Design metric is millimeters.	
height	–	98.5	–	mm	Includes module retention screws and ground bolt.	
height	–	3.88	–	in.	Includes module retention screws and ground bolt.	
length	–	242	–	mm	Includes mounting lugs.	
length	–	9.52	–	in.	Includes mounting lugs.	
width	–	40	–	mm	Excludes heat sinks.	
width	–	1.6	–	in.	Excludes heat sinks.	
Mass					Design metric is kilograms.	
no modules	1.10	1.11	1.12	kg	Including power supply.	
no modules	2.43	2.45	2.47	lb	Including power supply.	
fully populated	1.47	1.48	1.49	kg	Typical module weight of 74g.	
fully populated	3.25	3.27	3.29	lb	Typical module weight of 2.61oz.	
Environmental ratings					See <i>Environmental Qualification Handbook</i> .	
operating temperature	-40	–	85	°C	Chassis base/side plate temperature.	
storage temperature	-55	–	125	°C		
Finish					Electroless nickel plated.	
base, side and end plates	–	–	–	–	Painted black GRIGIO SCURO OPACO C604.	

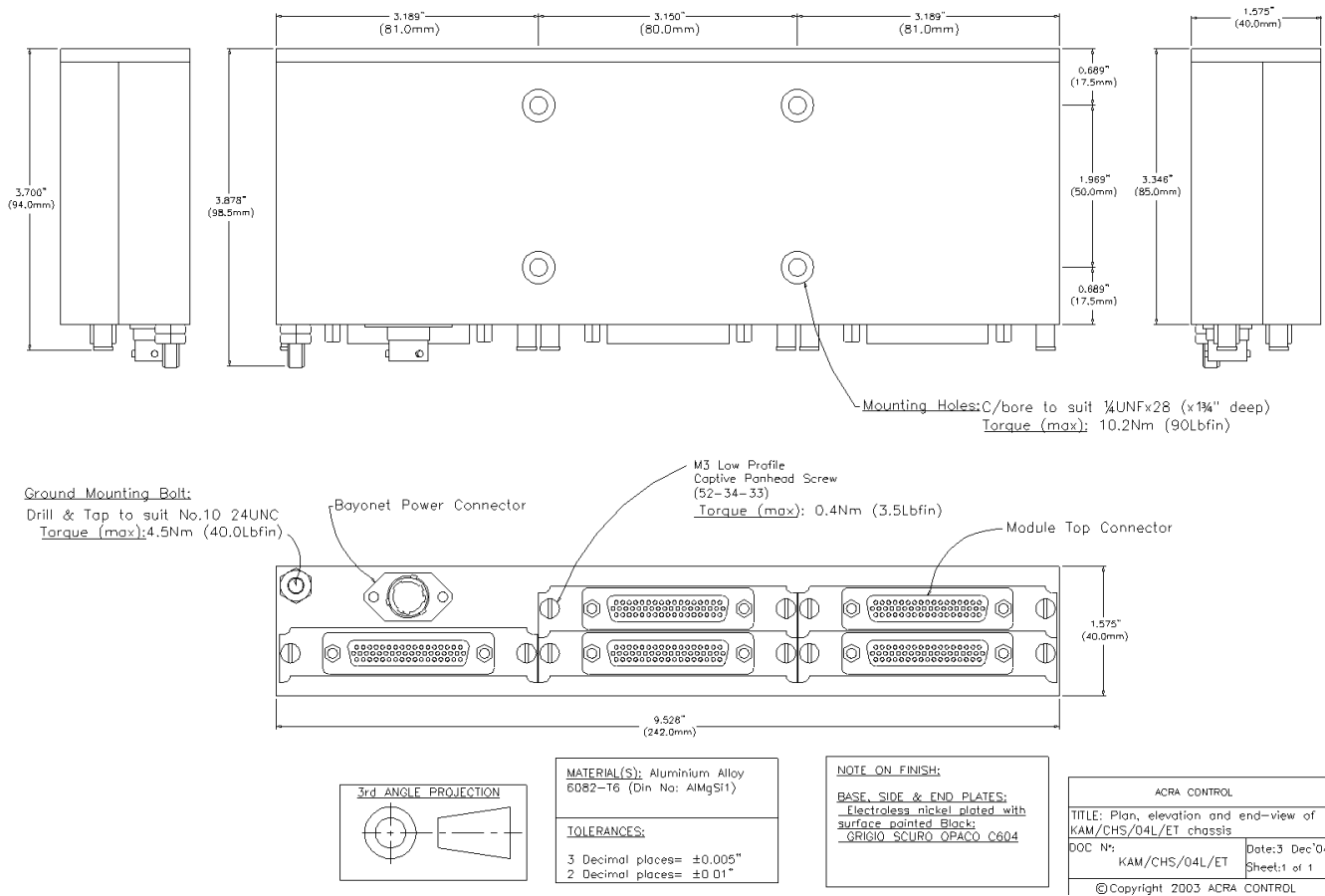


Figure 2: KAM/CHS/04L mechanical drawing

## Getting the most from the KAM/CHS/04L

Modules requiring bridge excitation from  $\pm 7V$  lines cannot be used in this chassis. Some modules have ordering options to take their excitation power from  $\pm 12V$  lines. Check individual module data sheets for further details.

**NOTE:** The KAM/CHS/04L is recognized as a 4L chassis by KSM-500 tools (kSetup and xReport) when used with the KAD/BCU/001/B (and later revisions). When the KAM/CHS/04L is used with controllers or revisions earlier than the KAD/BCU/001/B, and revisions of software tools earlier than kConfig 1.2, kSetup 1.0, and xReport 1.2, it is displayed as KAM/CHS/13U.

## Connector pinout of the KAM/PSU/006

PIN	NAME	SEE SPECIFICATIONS TABLE	COMMENT
1	POWER+	Nominal 28V supply	Isolated internally; aircraft power
2	POWER-	Return for nominal 28V	Isolated internally; aircraft power
3	CHASSIS	Chassis	
4	GND	Internal ground	
5	+12V	Internal +12V out	Current depends on internal loading
6	+5V	Internal +5V out	Current depends on internal loading

## Ordering information

PART NUMBER	DESCRIPTION
KAM/CHS/04L/B	Acra KAM-500 chassis, narrow form - 4 user-slots

By default, the standard power connector, CON/PSU/007/FL/100, is included with each chassis 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
KAM/CHS/04L/B	Uses chassis size identification circuit	Recommended for new programs
KAM/CHS/04L/B/ET	First release	Recommended for new programs

## Supporting software

SOFTWARE	DETAILS
DAS Studio 3	User interface for setup and management of data acquisition, network switches, recorders and ground stations in an integrated environment
KSM-500	This module is supported by the KSM-500 suite of software tools

## Related products

MODULE	DETAILS
ACM/LID/001	Spare user-slot lids and spare screws for the Acra KAM-500 system
KAM/PSU/006/ET	Power Supply Unit for KAM/CHS/04L

## Related documentation

DOCUMENT	DETAILS
DOC/DBK/001	Acra KAM-500 Databook
DOC/MAN/018	KSM-500 Databook
DOC/HBK/002	Environmental Qualification Handbook
TEC/NOT/016	Power dissipation
TEC/NOT/049	Power estimation

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