

KAM/CHS/05F/SC

Acra KAM-500 chassis - 5 user-slots

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Overview

The KAM/CHS/05F/SC is a compact, five user-slot Acra KAM-500 chassis, which along with the housing and backplane, includes a KAM/PSU/013/SC power supply unit.

The backplane has five 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.

This chassis has been specially designed for space-limited applications. As such, those modules which require excitation from $\pm 7V$ are not suitable as the KAM/PSU/013/SC does not supply these voltage levels.

Key Features

- Power supply unit and five 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
- Special mounting orientation

Applications

- Flight test instrumentation systems in limited spaces

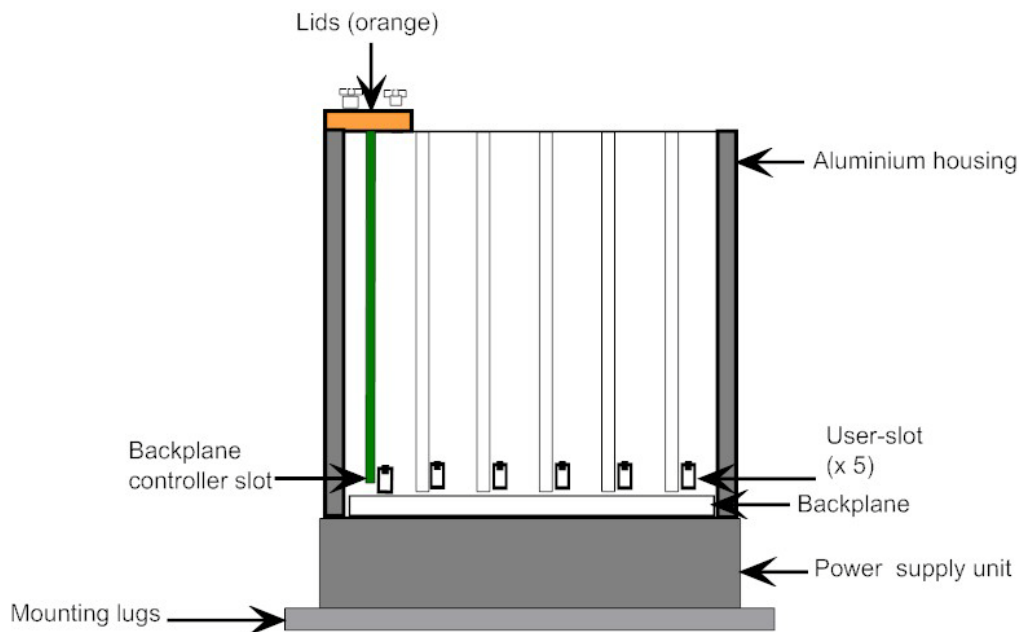


Figure 1: KAM/CHS/05F/SC with PSU and five user-slots

Specifications

TABLE 1		Mechanical specifications				
PARAMETER	MIN.	TYP.	MAX.	UNITS	CONDITION/DETAILS	
User slots	–	–	5	–		
Dimensions					Design metric is millimeters.	
height	–	117.5	–	mm	Includes module retention screws and ground bolt.	
height	–	4.62	–	in.	Includes module retention screws and ground bolt.	
length	–	140	–	mm	Includes mounting lugs.	
length	–	5.51	–	in.	Includes mounting lugs.	
width	–	92	–	mm	Excludes heat sinks.	
width	–	3.62	–	in.	Excludes heat sinks.	
Mass					Design metric is kilograms.	
no modules	–	1.116	–	kg	Including power supply.	
no modules	–	2.46	–	lb	Including power supply.	
fully populated	–	1.56	–	kg	Typical module weight of 74g.	
fully populated	–	3.43	–	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.	
top parts	–	–	–	–	Painted REINORANGE RAL2004.	
base, side and end plates	–	–	–	–	Painted black GRIGIO SCURO OPACO C604.	

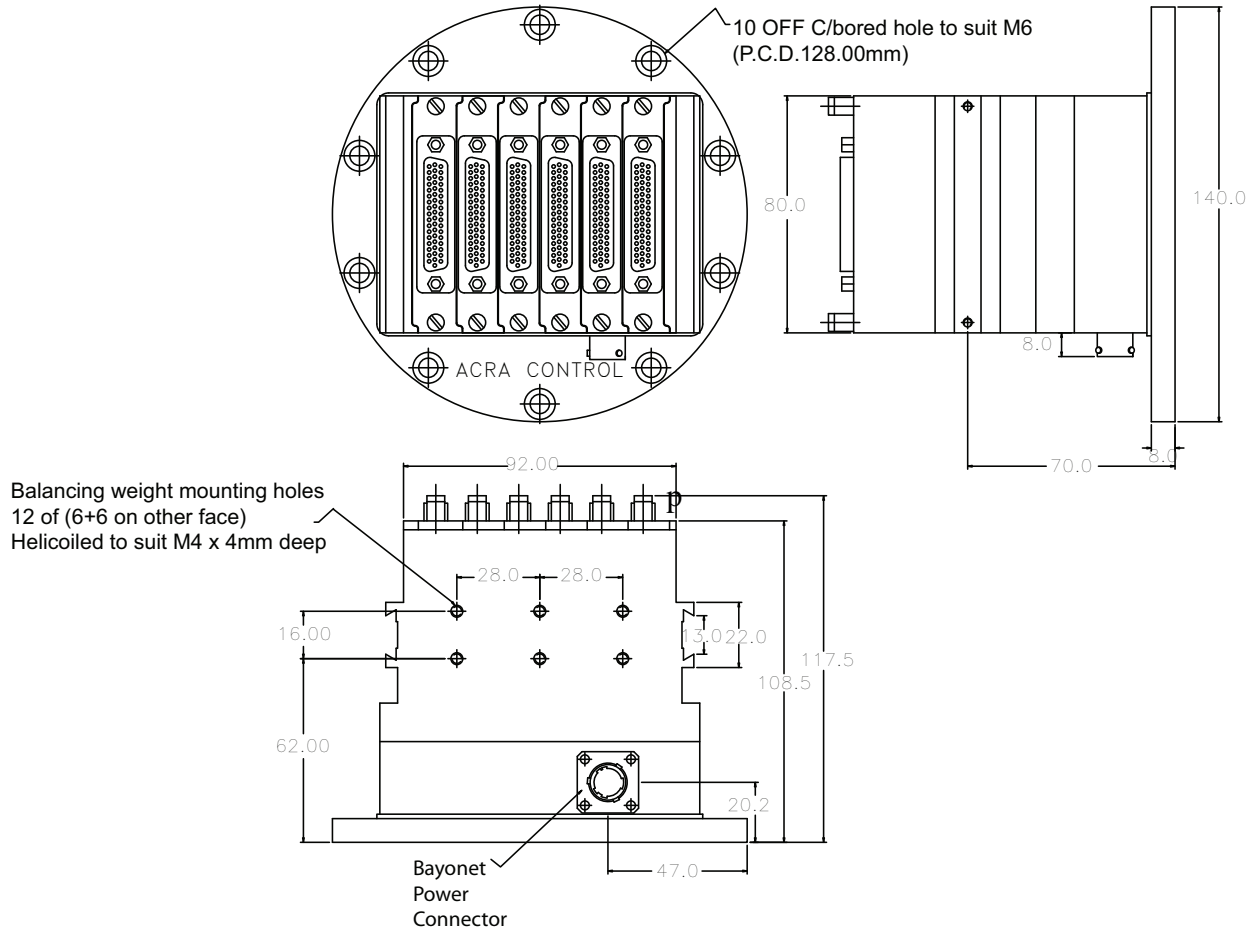


Figure 2: KAM/CHS/05F/SC mechanical drawing

Getting the most from the KAM/CHS/05F/SC

Slot J2 is always reserved for the backplane controller module. A controller is required in slot J2 for control and programming of user-modules. Due to mechanical constraints, only the BCU family of controllers can be used in the KAM/CHS/05F/SC.

Connector pinout of the KAM/PSU/013/SC

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	Current depends on internal loading
6	+5V	Internal +5V	Current depends on internal loading

Ordering information

PART NUMBER	DESCRIPTION
KAM/CHS/05F/SC	Acra KAM-500 chassis - 5 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). Also included with each chassis in the shipment is ACC/WGT/006 - a bag of six weights which can be used for balancing.

Revision history

REVISION	DIFFERENCES	STATUS
KAM/CHS/05F/SC	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

PRODUCT	DETAILS
KAM/PSU/013/SC	+5V and $\pm 12V$ power supply unit for Acra KAM-500 chassis

Related documentation

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