

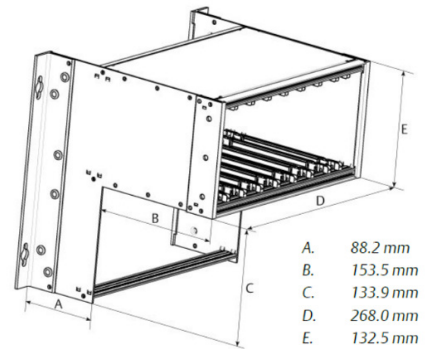
# A6500-FR Front Termination Rack

The A6500-FR Front Termination Rack is part of the AMS 6500 ATG machinery protection system. It is a 12.25" rack (50HP width and 6RU height). The Front Termination Rack allows you to install up to 6 protection cards (two channel A6500-UM Universal Measuring Card and/or four channel A6500-TP Temperature Process Card), one A6500-RC Relay Card, and one A6500-CC Com Card.

The bottom of the Front Termination Rack is equipped with screw term connectors to connect input and output signals, with D-Sub connectors to provide sensor raw signals and slide switches to configure key-signals and binary inputs.

Each of the 6 slots for protection cards has four eight-pole screw term connectors for connecting several sensor types (eddy current sensors, piezoelectric sensors, seismic sensors, RTDs, etc.), binary inputs, binary outputs (function outputs), current outputs, and pulse outputs. The available number of measuring channels and all other functions depend on the installed cards.

The relay card slot has 5 digital inputs available on backplane with screw term connectors.



Power Supply		
Nominal Supply Voltage	+24 V DC	redundant
Limit	+19 to +32 V DC	in case of a single failure, supply voltage must not exceed the level of IEC 60204-1 or IEC 61131-2 (SELV/PELV)
Power Consumption of Slots	<100 W	of installed cards
Power Consumption Outputs	<150 W	additional supply for external use of digital outputs



Slot Distribution	
Number of Measurement Card Slots (A6500-UM and A6500-TP)	6 (each slot 6HP)
Number of Relay Card Slots	1 (10HP)
Number of COM Card Slots	1 (4HP)

Environmental, General		
Protection Class	IP20	according to IEC 60529 rack mounted, otherwise IP00
Conformal Coating	Airborne contaminants resistance	ISA-S71.04-1985 airborne contaminants class G3
	Material: HumiSeal® 1B31 EPA	According to IPC-CC-830B and IPC-A 610
Operating Temperature	-20°C to +70°C (-4°F to 158°F) with forced cooling -20°C to +55°C (-4°F to 131°F) without forced cooling	
Storage Temperature	-40°C to +85°C (-40°F to 185°F)	
Relative Humidity	5 to 95%	non-condensing
Vibration	0.15mm (0.591in) 20 m/s <sup>2</sup>	10 to 55Hz 55 to 150Hz according to IEC 60068-2-6
Shock	150 m/s <sup>2</sup>	according to IEC 60068-2-27, 4000 shocks per axis
Operating Altitude	<2000 m	above sea level
Connector Measurement Card Slot	type F48 female	according to IEC 60603-2
Connector Relay Card Slot	type C96 female type F48 female	according to IEC 60603-2
Connector COM Card	type C30 female	according to IEC 60603-2
Terminals Power Supply	2.5 mm <sup>2</sup>	pluggable screw term connection
Terminals I/O	1.5 mm <sup>2</sup>	pluggable screw term connection
SUB-D Connector	SUB-D 9	shielded, UNC 4-40 screw lock
Dimensions	6RU/50HP	conform to IEC 60297
Weight	app 2400g (5.291lbs)	exclusive packaging

## Compliance and Certifications

CE	EMC – EN61326-1 2014/30/EU 2014/34/EU 2011/65/EU
ATEX	EN 60079-0:2012 EN 60079-15:2010
IEC-Ex CCOE PESO India	IEC 60079-0:2011; Edition: 6.0 IEC 60079-15:2010; Edition: 4
CSA	CAN/CSA-C22.2 NO. 0-10 CAN/CSA-C22.2 NO. 61010-1-12 CAN/CSA-C22.2 NO. 60079-0:15 CAN/CSA-C22.2 NO. 60079-15:12 IEC 60529:2013 + COR2:2015 UL 61010-1:12 UL 60079-0:13 UL 60079-15:13
EAC	TP TC 012/2011 ГОСТ 31610.0-2014 ГОСТ 31610.15-2014
CCC	GB 3836.1-2010 GB 3836.8-2014
Marine	DNV GL rules for classification – Ships and offshore units
Safety (SIL): SC 2 (SIL 2 Capable)	IEC 61508:2010 Parts 1-7

## Hazardous Area Approvals

Non-sparking nA in combination with nC	
ATEX	II 3G – Ex nA nC IIC Gc, -20°C ≤ Ts ≤ 70°C (with Ts ≤ 70°C the requirements for temperature class T4 are met)
IEC-Ex	II 3G – Ex nA nC IIC Gc, -20°C ≤ Ts ≤ 70°C (with Ts ≤ 70°C the requirements for temperature class T4 are met)
CSA	Class I Division 2, Groups A, B, C, D, T4 Class 1, Zone 2 Ex / AEx nA nC IIC T4 Gc (the ambient temperature within the end use enclosure shall not exceed 55°C)
EAC-Ex	Ex nA nC IIC Gc, U -20°C ≤ Ts ≤ 70°C
CCC-Ex	Ex nA nC IIC Gc -20°C ≤ Ts ≤ 70°C
CCOE PESO India	Ex nA nC IIC T4 Gc, -20°C ≤ Ts ≤ 70°C (with Ts ≤ 70°C the requirements for temperature class T4 are met)
KTL Korea	Ex nA nC IIC -20°C ≤ Ts ≤ 70°C

## Ordering Information

Model Number	Product Description
A6500-FR	A6500-FR – FRONT TERMINATION RACK, 6 UM, 1 RC, 1 CC SLOT

## Product Accessories

Model Number	Product Description
A6068	REDUNDANT POWER SUPPLY 100-220VAC, 24VDC
MHM-9199-50010	AMS 6500 ATG FAN KIT FOR A6500-FR, ATEX
MHM-9199-50011	AMS 6500 ATG MOUNTING KIT MARINE FOR A6500-FR

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