ASTRA Server 1U

Technical Reference Sheet

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TRS-1020-03
Aveco

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INTRODUCTION

OVERVIEW

Aveco's automation servers are industrial PC computers with a mission critical real-time operating system QNX. Automation software consists of a large set of dedicated software modules that can be used to build the required solution, from all-in-one automation server providing MCR and Studio automation together with the MAM, up to large networks of geographically distributed redundant automation servers, always acting as one automation system.

The role of our automation has always been to integrate the 3rd party products of our customers' choice to deliver optimum solutions for their business models; we make a working playout facility out of a pile of 3rd party boxes.

Figure 1. ASTRA Server 1U

DESCRIPTION

Designed to fully support small to large systems for ingest and playout, the ASTRA Server is the heart of the automation system. A fully featured piece of hardware which was built with the needs of a demanding studio in mind. With features including multi-site disaster recovery, multi-path architecture for flexible control and redundancy options, and hot-swappable modules for expansions, upgrades and repairs, you can be certain about your on air status.

Equipped with ASTRA MCR or ASTRA Studio, the ASTRA server can become the most powerful, reliable, and user friendly broadcast automation system on the market.

Assembly of the ASTRA Server 1U:

Unit	Control Ports for Devices
ASTRA Server 1U	Ethernet RJ45

PACKAGE CONTENTS

When delivering ASTRA Server 1U, Aveco will include the server unit and only the power cables necessary to supply power to the server.

Qty	Content
1	ASTRA Server 1U
2	Power cable, 1m
1	VRP6 Card (optional)

TECHNICAL SPECIFICATIONS

ASTRA SERVER SPECIFICATIONS
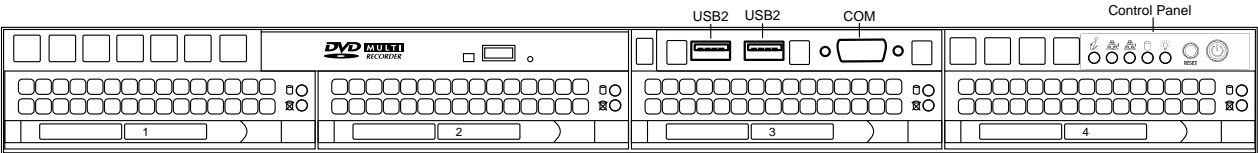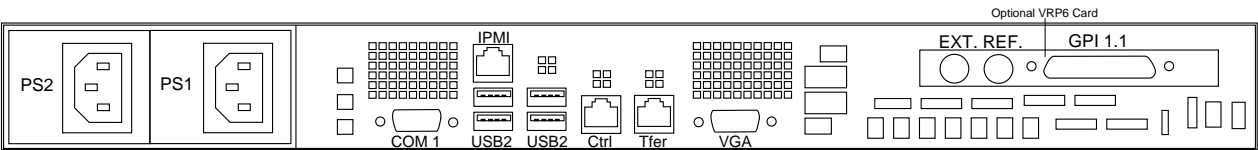
Figure 2. ASTRA Server 1U - Front Panel Schematic

Figure 3. ASTRA Server 1U - Back Panel Schematic

Connectivity	
Power Connector	IEC/C14
Control Interface	Ethernet RJ45

Physical	
Dimensions	1U (483mm x 45mm), depth 105mm
Weight	~14kg

Power	
Power Supply	Redundant, 350W
Input Voltage	110-240V, 50-60Hz
Power Consumption	280W

SERVER CONNECTORS

(OPTIONAL) VRP6 CARD CONNECTORS

Figure 4. Pinout of GPI Connectors - GPI 1.1

Connector GPI 1.1 D-SUB 25 pin female GPI OUT, GPI IN, LTC IN			
1	GPI IN 1	14	GPI OUT 1 a
2	GPI IN 2	15	GPI OUT 1 b
3	ground	16	GPI OUT 1 c
4	GPI IN 3	17	GPI OUT 2 a
5	GPI IN 4	18	GPI OUT 2 b
6	ground	19	GPI OUT 2 c
7	GPI IN 5	20	GPI OUT 3 a
8	GPI IN 6	21	GPI OUT 3 b
9	ground	22	GPI OUT 3 c
10	GPI IN 7	23	GPI OUT 4 a
11	GPI IN 8	24	GPI OUT 4 b
12	LTC IN a	25	GPI OUT 4 c
13	LTC IN b		

OPERATION

CHASSIS CONTROL PANEL

The chassis control panel is found in the upper right corner of the front panel. The control panel contains a power button, reset button, and several LED indicators.

Figure 5. Chassis Control Panel
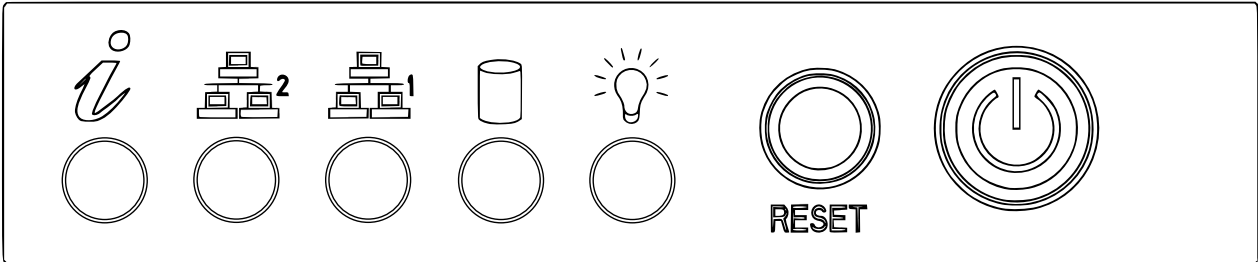
POWER ON THE SERVER

The server is switched on using the POWER button on the front panel of the server.

POWER OFF THE SERVER

To switch off the server, follow the instructions on the monitor.

1. Stop the system - press "S" and confirm with "Y"
2. Prepare for Power off - press "P", after that, you will see a countdown from 10 to 0
3. When the countdown reaches 0, you will see a notice, "System may now be powered down". Now, you can power off the server using the POWER button
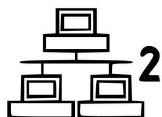
LED INDICATORS

| Information LED	
Status	**Description**
Solid Red	Overheating has occurred
Blinking Red (1Hz)	Fan failure, check for an inoperative fan
Blinking Red (0.25Hz)	Power failure, check for an inoperative PSU
Solid Blue	Local UID function has been activated
Blinking Blue (300ms)	Remote UID function has been activated

NIC1: Indicates network activity on GLAN1 when flashing.

NIC2: Indicates network activity on GLAN2 when flashing.
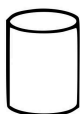
HDD: Indicates SAS/SATA activity when flashing.

Power: Indicates power is being supplied to the system's PSUs. This LED is normally illuminated when the system is powered on.

HARD DISK LED STATUS

The hard disks are hot-swappable so that any faulty hard disk can be removed and replaced without any interruptions to the system's operation, and they are optionally configured in a RAID setup.

Each SAS/SATA drive carrier is equipped with two LEDs.

Drive Carrier LEDs	
Color	**Description**
Blue	Indicates drive activity. This LED blinks on and off when that particular drive is being accessed.
Red	Indicates an SAS/SATA drive failure.

POWER SUPPLY LED STATUS

The power supplies are equipped with a status indicating LED to point out if overheating is present.

Drive Carrier LEDs	
Status	**Description**
Solid Green	System is powered on.

Drive Carrier LEDs	
Solid Amber	System is powered off but plugged in
Blinking Amber	Internal temperature is at or above 63°C and will shut down if the temperature reaches 70°C

The Information LED on the chassis control panel will also indicate a power failure.