

AXP640-DC

Quick Start Guide

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Welcome

Thank you for buying a chassis from Artesyn Embedded Technologies. As part of Artesyn's commitment to allowing you to differentiate your solution, Artesyn has developed System Services Framework (SSF).

SSF Overview

System Services Framework (SSF) is a management and configuration interface to Artesyn's ATCA™ hardware and software products. It facilitates system level configuration and management access to SSF managed hardware and software components, through different protocol interfaces like Web, XML, and CLI. It is a powerful framework for software service management and forms the cornerstone of Artesyn's value-added software releases - now and in the future. Accelerate your project delivery by simplifying development. Focus on creating a compelling application or service, rather than system management software.

Complimentary Evaluation Licenses

Artesyn is providing completely free of charge evaluation license for SSF. With these licenses, you can explore the functionality of SSF.

Every Artesyn Centellis™ ATCA chassis ships with a 3 month full access evaluation license and 12 month read-only access license, which can be easily and cost-effectively upgraded to full access.

Process for Receiving Evaluation License

You will receive an auto generated e-mail from Artesyn Order Management System. This e-mail contains product related information, such as product name, evaluation period, and product key. You can use the product key to generate finger print of your blade, which in turn can be used to generate the license key for SSF.

For more information regarding license, refer *License Management section in SSF Installation and Use manual*.

Purchasing SSF

SSF is licensed per chassis with the license being node locked to the element running the SSF core (either an external PC or a PrAMC-7311). For example a license could be purchased for the AXP-640 chassis and node locked to a PC running the core and having IP connection to the AXP-640. Any AXP-640 system can be accessed from the licensed node with any combination of SSF enabled blades.

We hope and expect that the benefits of SSF will be clear once you have tried it on your system. In the event that you want to purchase a perpetual license after the evaluation license has expired, please contact your Artesyn Embedded Technologies Sales team.



1 What's in the box?

Make sure you receive all items of your shipment:

- AXP640-DC
- Other items that were ordered
- Printed *Safety Notes*



When installing or servicing the module or accessories, strictly observe the safety precautions in the *Safety Notes*. Otherwise, personal injury or property damage may occur.

2 Observe ESD-safe measures

- Use either a properly grounded ESD wrist strap or make sure that you are working in an ESD-safe environment.
- Connect to the ESD connector at the front or the rear of the system.

3 Prepare the installation site

- For information on the environmental and power requirements, see the *AXP640-DC Installation and Use* manual.
- Operating temperatures refer to the temperature of the air circulating around the blade and not to the actual component temperature.

4 Mounting the Shelf

23" EIA Rack/Cabinet

Front mounting brackets are required to attach the shelf to an EIA 23" frame.

1. Locate the standard mounting hole and slot locations on the front mounting flanges on the AXP640 shelf.
2. Fasten the mounting brackets to the back side of the front chassis flanges using M6 screws x 12mm at each of the four locations.
3. Be sure to mount the shelf with metal screws or bolts that give a good electrical connection between the screws or bolts and the mounting surface.
4. Tighten all screws using a torque setting of 35.5 to 38.5 inch-pounds.

5 Mounting the Shelf

600mm ETSI Rack/Cabinet

The shelf mounts directly from the integrated flange on the front of the shelf.

1. Locate the standard mounting hole and slot locations on the front integrated mounting flanges on the AXP640 shelf.
2. Fasten the mounting brackets to the back side of the front chassis flanges using M6 screws x 12mm at each of the four locations.
3. Be sure to mount the shelf with metal screws or bolts that give a good electrical connection between the screws or bolts and the mounting surface.
4. Tighten all screws using a torque setting of 35.5 to 38.5 inch-pounds.

6 Grounding the Shelf

Use an 8 AWG wire with a 2-hole copper lug and connect directly to the earth ground point located on the right side of the back of the shelf; connect the other end of the wire to a reliable earth ground. Use the torque setting required by the connector supplier. The 2-hole lug prevents rotation of the lug and ensures a permanent bonding of ground to the shelf.



7 DC Power Cable

Power is introduced to the shelf at the DC inlet located in the rear of the shelf. The recommended power cable is a 6 AWG gauge that meets the specifications for this shelf. There are two lugs for each DC feed.

8 DC Power Cable Termination

Use lugs that accommodate large gauge wires for up to 60 AMPs DC (6 AWG) when connecting to the PEM.

9 Connecting the DC Cables

Have the following tools on hand before you begin these steps: standard Phillips screwdriver, nut driver, torque wrench, multimeter, and lugs.

1. Locate the target power input cable's terminals at the branch circuit or power distribution unit. Open the external circuit breakers that provide DC feed power to the chassis.
2. Lock and tagout the circuit breakers on the branch circuit or power distribution unit.
3. Using the appropriate tool, carefully remove the plastic covering over the terminal blocks.
4. Confirm that there is no power to the chassis lug bolts. Using a multimeter, measure between the two lugs and then measure between the chassis ground and each lug. If the DC potential is 3.0VDC or less, then power is not present.

9 Connecting the DC Cables (cont.)

5. Attach the DC power cables (input and return) to the dual lug bolts on each chassis power feed.
6. Using a torque wrench, tighten the nuts with a recommended torque setting of 35.5 to 38.5 inch-pounds. Make sure all DC leads are fastened securely.
7. Replace the plastic cover over the terminal blocks.
8. Verify that the PEM circuit breakers are in the ON position.
9. Break the tagout or lockout seals on the branch circuit or power distribution unit.
10. Apply power by closing the branch circuit or power distribution unit. The OOS indicator LED will glow solid red and the other LEDs will go dark. The OOS will not go dark and the IS indicator LED will not illuminate until the external power circuit breakers are closed.
11. Verify that all FRU LEDs illuminate and the PEM's IS LED is green, and the OOS LED is dark.

10 Powering Up the System

1. Push the PEM circuit breakers to the ON position.
 2. Verify that all FRU LEDs illuminate and the PEM's In Service LED is green.
- The system executes its normal start-up routine and is then ready to use.

Finding more information

For more information on the product, see the *AXP640-DC Installation and Use* and other related documentation.

Visit our Web site <http://www.artesyn.com/computing>. Use the Product Search link to look for technical documentation.

Technical Assistance

To request technical assistance, visit our Web site <http://www.artesyn.com>.