Before You Begin

How to Get Assistance
If you need help with your Alcatel-Lucent products, contact one of our TAC Engineers at 866-582-3688.

Packaging Inspection
If the shipping container shows evidence of rough handling, inspect the equipment carefully for shipping damage. If damage is found, notify the carrier immediately, and annotate the damage on the bill of lading.

Product Summary
This publication provides instructions for installing an MC-AR3 or MC-DBR3 Metro Cell cabinet on a pad, pole, wall, or H-frame.

Product Nomenclature
MC = Metro Cell Cabinet
A = AC
D = DC
B = Battery Backup
R = Router
X = Variant Number 1, 2, 3, 4, etc.

Example:
- 7310 MC-AR3 = Metro cell cabinet, AC-powered with router, variant 1
- 7310 MC-DBR3 = Metro cell cabinet, DC-powered, battery backup with router, variant 1
- 7310 MC-DB3 = Metro cell cabinet, DC-powered, battery backup without router, variant 1
- 7310 MC-A3 = Metro cell cabinet, AC-powered without router, variant 1

For Use With
This document is for use with 7310 Metro Cell Cabinet (PN 3MV00438AE) and (PN 3MV00438AF).

Associated Documentation

<table>
<thead>
<tr>
<th>Name</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcatel-Lucent 9764 Metro Cell Outdoor V1.0 2x5W B13 LTE Hardware Installation Document</td>
<td>3MN-01714-0002-RJZZA</td>
</tr>
</tbody>
</table>
This cabinet and its equipment might not be suitable for use in corrosive environments. See NEC 547 or CEC 2-400.

Your equipment may be damaged and the warranty voided if:

- Components (including cables and equipment) are connected or disconnected while power is applied to them
- Incorrect wire connections are made
- Power polarity is reversed
- Voltage rating is too high

The following precautions must be observed during all phases of installing cabinets and equipment. Failure to comply with these precautions or with specific warnings elsewhere in this manual risks personal injury and violates safety standards of design, manufacture, and intended use of the equipment. Alcatel-Lucent is not responsible for any equipment damage or poor operating performance when these guidelines are not followed or when noncertified installers perform the work.

<table>
<thead>
<tr>
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<th>Precaution</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Safety</td>
</tr>
<tr>
<td></td>
<td>Codes</td>
</tr>
<tr>
<td></td>
<td>Security</td>
</tr>
</tbody>
</table>
This manual contains safety labels in the form of DANGER, WARNING, and CAUTION. The labels—generic here but specific in the manual—have the following definitions.

<table>
<thead>
<tr>
<th>Type of Precaution</th>
<th>Precaution</th>
</tr>
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<tbody>
<tr>
<td>Electrical</td>
<td>Proper Ground</td>
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<tr>
<td></td>
<td>Explosive Atmosphere</td>
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<tr>
<td></td>
<td>Live Circuits</td>
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<tr>
<td></td>
<td>Lightning Storms</td>
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<tr>
<td></td>
<td>Voltage Detector</td>
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<tr>
<td>Equipment</td>
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<td>Removing Components</td>
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<td></td>
<td>Specifications</td>
</tr>
<tr>
<td></td>
<td>Substituting Parts or Making Modifications</td>
</tr>
</tbody>
</table>

DANGER:
Danger indicates that the described activity or situation may result in serious personal injury or death; for example, high voltage or electric shock hazards.

WARNING:
Warning indicates that the described activity or situation may, or will, cause equipment damage or serious performance problems.

CAUTION:
Caution indicates that the described activity or situation may, or will, cause service interruption.
The safety alert symbol ⚠️ is used on product labels and in this guide to alert the user to important operating and maintenance instructions.
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Introduction

The 7310 Metro Cell cabinets power internally-mounted Metro Cells. The cabinets can be deployed quickly and mounted easily on a pad, wall, pole, or rooftop.

- The rear of the cabinet has bulkhead connectors for attaching Metro Cell and GPS cables.
- An exterior j-box is included to splice main AC power feed.
- Metro Cell and SAR-W equipment is mounted in swing-down brackets for easy field installation and maintenance.
- The cabinet can be installed on a pole, wall, or H-frame with a single bracket, or on a pad or platform with a 4-in. plinth kit.
- The cabinet is passively cooled for little to no maintenance.
Precautions

DANGER

Hazard of Electric Shock or ARC Flash

- Have a trained, licensed electrician perform the electrical work.
- Consult a local building or electrical inspector for current National Electrical Code requirements before work begins. A permit might be needed; some codes might require inspection of the finished work.
- Wear appropriate personal protection equipment, and follow safe electrical work practices. See NFPA 70E.
- Do not install equipment showing any physical damage.
- Do not allow petroleum-based paints, solvents, or sprays to contact nonmetallic parts of the cabinet.
- Reattach all devices, doors, and covers before switching on power to the cabinet.
- DO NOT wear jewelry or a wrist watch when working around batteries.

Failure to follow these precautions will result in death or serious injury!

Threat Releases

The on-site technician is responsible for acquiring threat releases before work begins. Neither Alcatel-Lucent nor its representatives will start any work without site management approval.

Site Considerations

- A site must be accessible to equipment for installation, maintenance, and expansion.
- All services required at the site, including electrical, site grounding, and other utilities, must be available, reliable, and able to grow with planned site expansion.
- Cabinet door must be accessible and have room to open.
- To avoid high-temperature shutdown, do not place the cabinet in the following locations:
  - Within alcoves prone to heat gain
  - Next to any surface within 4 ft (120 cm) of the cabinet or near hot air exhaust from neighboring buildings or structures
  - Rooftop applications where the dark color of the roof surface may increase the ambient air temperature in excess of 46°C. Operating at levels at or above 46°C for prolonged periods of time will affect the reliability and proper function of the equipment.
- Site planning must include safety and maintenance plans.
- Plan the site to meet or exceed the requirements of any local architectural codes, bylaws, environmental restrictions, and right-of-way easements, as applicable. Off-ground mounting locations (poles, walls, etc.) must meet all local codes and ordinances pertaining to the cabinet weights and dimensions described in this manual.
Thermal Clearance

WARNING
Potential Equipment Damage!

- Following cabinet thermal requirements is critical. To avoid equipment damage, do not install the AC or DC metro cell cabinets onto a dark roof or dark wall.

Dimensions in inches (centimeters):

- Top View: Junction Box Access Area for Connecting AC to cabinet
  - Distance required when cabinet is placed next to another heat source such as another cabinet:
    - 30.0 (76.2) inches
    - 10.0 (25.4) inches

- Top View: Junction Box Access Area for Connecting AC to cabinet
  - Distance required when cabinet is placed next to a non-heat source such as a wall:
    - 30.0 (76.2) inches
    - 5.0 (12.7) inches
Supplied Items

**IMPORTANT** Do not store installation manual in cabinet after cabinet installation is complete.

Items shipped with the MC-AR3 and MC-DBR3 Metro Cell cabinets include:

- 3/16-in. Allen wrench
- 5/32-in. pin-in-hex bit
- Torx T15 security bit
- Lifting tabs
- Pallet/plinth mounting bolt hole plugs
- Installation manual

Wiring Diagrams

Refer to the wiring diagrams provided at the end of this installation manual.
**Knockout Removal**

**Cable Access**

Remove the knockouts for cable access before mounting the cabinet. The site plan should show which knockouts to remove for the customer’s configuration. Follow best practices to remove knockouts.

**Cabinet Mounting**

The Metro Cell cabinet can be mounted in a number of ways:

- Pad mount
- Pole mount/Wall or H-frame mount (optional kit) — PN 3MV00442AB for use with AC cabinets or PN 3MV00442AA for use with DC cabinets
- 4-in. plinth mount (optional kit) — PN 3MV00443AB for use with AC and DC cabinets
Cabinet Lifting

Determine a safe method of lifting the cabinet based on maximum weight. Use a portable lifting/supporting device to mount the cabinet to a pole, wall, H-frame, pad or platform, if necessary.

WARNING
Potential equipment damage

- Engineer a mounting apparatus to the weight of the cabinet before lift.
- The cabinet must be stabilized and supported for mounting and installation.
- Follow any directions from the manufacturer for moving equipment to be installed.
- Ensure all required drawings, local installation instructions, job specifications, and other reference documentation are available.
- Do not lift cabinet with optional customer equipment or batteries installed.
- Do not lift cabinet with the doors open.
- Follow local safety requirements when lifting the cabinet.
- Do not stand under the cabinet while it is suspended.

To install the lifting tabs

1. Open the cabinet and retrieve the lifting tab hardware.
2. Align the lifting tabs with the chamfered screw (hole-side out), then install the lift tabs. Torque to 80 in-lb.

Cabinet Weight

Note Do not lift cabinet with batteries installed.

This table provides the weight of the cabinet. Add together the weights pertinent to your configuration to determine lifting hoist construction if necessary and the amount of allowable weight for customer equipment.

<table>
<thead>
<tr>
<th>Assembly</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-AR3 cabinet, SAR-W, PDU</td>
<td>140 lb (63 kg)</td>
</tr>
<tr>
<td>MC-DBR3 cabinet, SAR-W w/out batteries installed</td>
<td>220 lb (99 kg)</td>
</tr>
<tr>
<td>MC-DBR3 cabinet battery weight</td>
<td>175 lb (79 kg)</td>
</tr>
</tbody>
</table>
Cabinet Dimensions

MC-AR3 Cabinet

Dimensions in inches (centimeters)
MC-DBR3 Cabinet

Dimensions in inches (centimeters)

Front View

Top View

Side View

Door Open Equipment Tipped Out
Pole Mount

Pole Mount Bracket

<table>
<thead>
<tr>
<th>Kit PN</th>
<th>Document PN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3MV00442AA</td>
<td></td>
<td>Metro Cell DC Cabinet Wall/Pole Mounting Bracket Kit</td>
</tr>
<tr>
<td>3MV00442AB</td>
<td></td>
<td>Metro Cell AC Cabinet Wall/Pole Mounting Bracket Kit</td>
</tr>
</tbody>
</table>
Kit Contents

**MC-AR3**
- (1) Pole mount bracket
- (4) 3/8-16 x 7/8-in. long stainless steel bolts
- (4) 3/8-in. stainless steel split-lock washers
- (4) 3/8-in. stainless steel flat washers
- (2) 1/4-20 stainless steel flathead screws

**MC-DBR3**
- (1) Pole mount bracket
- (8) 3/8-16 x 7/8-in. long stainless steel bolts
- (8) 3/8-in. stainless steel split-lock washers
- (8) 3/8-in. stainless steel flat washers
- (2) 1/4-20 stainless steel flathead screws

*Note*  Remove the snap-in covers for pole mount bracket mounting access per the cabinet installation manual before mounting the cabinet per the instructions below.

**Tools and Materials Required**
- Standard tools, including a nut driver
- An installed pole that meets local codes and ordinances for this category of cabinet
- A mechanical support to hold the cabinet in place while mounting
- Pole mount securing materials—bolts and hardware

≡≡ To install the pole mount bracket to a pole with threaded rods or bolts

1 Determine the cabinet mounting position on the pole:
   a Position the pole mount bracket onto the pole to use as a stencil for marking holes for the threaded rods or bolts (3/8-in. minimum to 1/2-in. maximum diameter; customer-provided). Ensure the pole mount bracket is level. Mark the hole locations.
Note: The pole mount bracket “V” tabs should be positioned at the top for correct pole mount bracket orientation.

2 Drill the mounting holes straight horizontally and level vertically.

3 Slide the threaded rods or bolts through the holes in the pole mount bracket and the drilled holes in the pole.

4 Apply anti-galling lubricant to the front end of each rod or bolt threads.

5 At the front of the pole mount bracket location, attach 1 set of customer-provided stainless steel hardware (size compatible with size of threaded rod: 1 flat washer, 1 split-lock washer, and 1 hex nut) to each threaded rod, leaving 1/2 to 3/4-in. of the rod extended past the nut.

Note: If using a bolt, only 1 set of securing hardware is required, at the rear of the pole only.

6 At the rear of the pole:
   a Attach 1 set of customer-provided stainless steel hardware (size compatible with size of
threaded rod or bolt: 1 flat washer, 1 split-lock washer, and 2 hex nuts) to each threaded rod or bolt, in the same stacking order (flat washer against the pole).

b  Pull the rod or bolt tight against the front of the pole, then tighten the nut at the rear until the split-lock washer flattens. Torque hardware to 15 ft-lb.

c  Cut off excess rod, leaving 1/2 to 4-in. extended past the nut. Deburr the cut end.

To mount the cabinet to the pole mount bracket

1  Insert 2 stainless steel 1/4-20 bolts (provided) into rear of cabinet in locations illustrated. Leave 1/4-in. gap from back face of cabinet to underside of bolt. The bolts are used to hold the cabinet onto the pole mount bracket while correct cabinet alignment is determined.

WARNING
Failure to follow safety procedures could result in injury or death!
- Follow local safety requirements when lifting the cabinet.
- Do not stand under the cabinet while it is suspended.
2 Secure a mechanical lifting device to both lifting tabs and lift the cabinet. It is recommended that 2 independent lifting devices be used to connect to the lifting hoist. See cabinet lifting section.

3 Position the cabinet so that the 2 installed stainless steel bolts on the rear of the cabinet align with the “V” tabs on the top of the pole mount bracket. Lower the cabinet into position using the alignment pins located at the bottom of the pole mount bracket. The cabinet is now temporarily secured for alignment and final installation onto the pole mount bracket.
To secure the MC-AR3 cabinet to the pole mount bracket

1. Open the cabinet door.
2. Apply anti-galling lubricant to the front end of bolt threads.
3. Using a 9/16-in. socket, secure the cabinet to the pole mount bracket following the hardware tightening sequence illustrated below. Mounting hardware ((4) 3/8-in. stainless steel hex bolts, stainless steel flat washers, and stainless steel split-lock washers supplied with the kit) is inserted through cabinet into nutserts in pole mount bracket. Torque hardware to 27 ft-lb.

   a. Install 2 mounting hardware stack-ups as illustrated.

   b. Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.

WARNING

Do not release the cabinet from the mechanical lifting device until the cabinet is permanently secured to the pole mount bracket. This information is outlined on the next page.

Do not stand underneath the cabinet until it is completely installed.

Note: cabinet is shown with pole and equipment removed to show hardware locations.
Note: Do not remove the rear bracket from the Metro Cell or SAR-W.

**WARNING**
Do not pull down on the RF cables.
4 Reposition each Metro Cell or SAR-W in its original orientation inside the cabinet.
5 Retighten the hardware securing the rear equipment bracket to the cabinet. Torque hardware to 30 in-lb.

**WARNING**
Failure to install all pole mount bracket mounting hardware could result in serious injury or death.

6 Install (4) pallet/plinth mounting bolt hole plugs (included inside the cabinet) into the pallet/plinth bolt holes located on the bottom of the cabinet.

---

**To secure the MC-DBR3 cabinet to the pole mount bracket**

1. Open the rectifier compartment door.
2. Open the equipment compartment door.
3. Apply anti-galling lubricant to the front end of bolt threads.
4. Using a 9/16-in. socket, secure the cabinet to the pole mount bracket following the hardware tightening sequence illustrated below. Mounting hardware (8) 3/8-in. stainless steel hex bolts, stainless steel flat washers, and stainless steel split-lock washers supplied with the kit) is inserted through cabinet into nutserts in pole mount bracket. Torque hardware to 27 ft-lb.
a  Install 2 hardware stack-ups as illustrated.

b  Open the battery compartment door.
c Install 4 hardware stack-ups as illustrated.

d Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.

**Note** Do not remove the rear bracket from the Metro Cell or SAR-W.
e  Pull each Metro Cell or SAR-W down to allow access to the cabinet’s rear wall and the pole mount bracket mounting locations.

f  Install 2 remaining hardware stack-ups as illustrated.

---

**WARNING**
Do not pull down on the RF cables.

5  Reposition each Metro Cell or SAR-W in its original orientation inside the cabinet.

6  Retighten the hardware securing the rear equipment bracket to the cabinet. Torque hardware to 30 in-lb.

---

**WARNING**
Failure to install all pole mount bracket mounting hardware could result in serious injury or death.
7 Install (4) pallet/plinth mounting bolt hole plugs (included inside the cabinet) into the pallet/plinth bolt holes located on the bottom of the battery base.

---

**Pole Mount Bracket with Banding**

**Tools and Materials Required**

- Standard tools, including a nut driver and those needed for banding
- An installed pole that meets local codes and ordinances for this category of cabinet
- A mechanical support to hold the cabinet in place while mounting
- Pole mount securing materials—banding

---

To mount the cabinet to a pole with banding

**Important!** If banding is the chosen pole mounting method, the installer must know the technique of banding a pole mount, and local codes and ordinances for this type of installation. Tools and materials required.

1 Secure the pole mount bracket to the determined position on the pole (minimum 4-in. diameter) by inserting 3/4-in. steel banding material through every banding location on the pole mount bracket.
**Note** The pole mount bracket “V” tabs should be positioned at the top for correct pole mount bracket orientation.

2 Secure and tighten the banding following the banding manufacturer’s recommendations.

3 Follow the instructions for mounting the cabinet to the pole mount bracket described previously.

**WARNING**
Failure to use all banding positions and not properly follow the manufacturer’s recommended banding procedures could result in serious injury or death.
Wall or H-frame Mount

Tools and Materials Required

- Standard tools, including a nut driver
- A load-bearing wall or H-frame structure that meets local codes and ordinances for this category and weight of cabinet
- Securing hardware specific to the wall construction and cabinet weight, determined and supplied by the customer
- A mechanical support to hold the cabinet in place while mounting

To mount the cabinet to a wall or H-frame

1. Determine the cabinet mounting position on the wall or H-frame:
   a. Position the pole mount bracket on the wall or H-frame to use as a stencil for marking holes for the mounting hardware (3/8-in. minimum to 1/2-in. maximum diameter; customer-provided). Ensure the pole mount bracket is level. Mark the hole locations.
2. Align the pole mount bracket mounting holes with the securing points on the wall or H-frame.

3. Install the mounting hardware (customer-provided) through the mounting holes on the pole mount bracket.

**Note** The pole mount bracket “V” tabs should be positioned at the top for correct pole mount bracket orientation.

4. Torque the mounting hardware as appropriate for the wall of H-frame anchoring materials and hardware.
To mount the cabinet to the pole mount bracket

1. Insert 2 stainless steel 1/4-20 bolts (provided) into rear of cabinet in locations illustrated. Leave 1/4-in. gap from back face of cabinet to underside of bolt. The bolts are used to hold the cabinet onto the pole mount bracket while correct cabinet alignment is determined.

**WARNING**
Failure to follow safety procedures could result in injury or death!

- Follow local safety requirements when lifting the cabinet.
- Do not stand under the cabinet while it is suspended.
Secure a mechanical lifting device to both lifting tabs and lift the cabinet. It is recommended that 2 independent lifting devices be used to connect to the lifting hoist. See cabinet lifting section.

Position the cabinet so that the 2 installed stainless steel bolts on the rear of the cabinet align with the “V” tabs on the top of the pole mount bracket. Lower the cabinet into position using the alignment pins located at the bottom of the pole mount bracket. The cabinet is now temporarily secured for alignment and final installation onto the pole mount bracket.

Note: Cabinet is removed from pole to show pole mount bracket/cabinet hardware mounting locations
To secure the MC-AR3 cabinet to the pole mount bracket

1. Open the cabinet door.
2. Apply anti-galling lubricant to the front end of bolt threads.
3. Using a 9/16-in. socket, secure the cabinet to the pole mount bracket following the hardware tightening sequence illustrated below. Mounting hardware ((4) 3/8-in. stainless steel hex bolts, stainless steel flat washers, and stainless steel split-lock washers supplied with the kit) is inserted through cabinet into nutserts in pole mount bracket. Torque hardware to 27 ft-lb.

   a. Install 2 mounting hardware stack-ups as illustrated.

   b. Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.

WARNING
Do not release the cabinet from the mechanical lifting device until the cabinet is permanently secured to the wall or H-frame. This information is outlined on the next page.
**Note** *Do not remove the rear bracket from the Metro Cell or SAR-W.*

**c** Pull each Metro Cell or SAR-W down to allow access to the cabinet’s rear wall and the remaining 2 pole mount bracket mounting locations.

**d** Install 2 remaining hardware stack-ups as illustrated.

**WARNING**

Do not pull down on the RF cables.
4 Reposition each Metro Cell or SAR-W in its original orientation inside the cabinet.
5 Retighten the hardware securing the rear equipment bracket to the cabinet. Torque hardware to 30 in-lb.

**WARNING**

Failure to install all pole mount bracket mounting hardware could result in serious injury or death.

6 Install (4) pallet/plinth mounting bolt hole plugs (included inside the cabinet) into the pallet/plinth bolt holes located on the bottom of the cabinet.

---

To secure the MC-DBR3 cabinet to the pole mount bracket

1 Open the rectifier compartment door.
2 Open the equipment compartment door.
3 Apply anti-galling lubricant to the front end of bolt threads.
4 Using a 9/16-in. socket, secure the cabinet to the pole mount bracket following the hardware tightening sequence illustrated below. Mounting hardware ((8) 3/8-in. stainless steel hex bolts, stainless steel flat washers, and stainless steel split-lock washers supplied with the kit) is inserted through cabinet into nutserts in pole mount bracket. Torque hardware to 27 ft-lb.
a  Install 2 hardware stack-ups as illustrated.

b  Open the battery compartment door.

**Note:** Cabinet is shown with pole and equipment removed to show hardware locations.
c Install 4 hardware stack-ups as illustrated.

d Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.

**Note** Do not remove the rear bracket from the Metro Cell or SAR-W.
e. Pull each Metro Cell or SAR-W down to allow access to the cabinet’s rear wall and the pole mount bracket mounting locations.

f. Install 2 remaining hardware stack-ups as illustrated.

---

**WARNING**

Do not pull down on the RF cables.

**5** Reposition each Metro Cell or SAR-W in its original orientation inside the cabinet.

**6** Retighten the hardware securing the rear equipment bracket to the cabinet. Torque hardware to 30 in-lb.

**WARNING**

Failure to install all pole mount bracket mounting hardware could result in serious injury or death.
7 Install (4) pallet/plinth mounting bolt hole plugs (included inside the cabinet) into the pallet/plinth bolt holes located on the bottom of the battery base.

**Pad/Rooftop Mount**

**4-in. Plinth**

The 4-in. plinth option requires a kit, separately ordered, but delivered with the cabinet.

<table>
<thead>
<tr>
<th>Kit PN</th>
<th>Document PN</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3MV00443AB</td>
<td></td>
<td>4-in. Plinth Kit</td>
</tr>
</tbody>
</table>

The 4-in. plinth mounting instructions are included in the kit installation manual.

**Kit Contents**

- (1) 4-in. plinth
- (1) Front plinth cover
- (1) Rear plinth cover
- (12) 1/4-20 stainless steel security screws
- (12) 1/4-in. stainless steel split-lock washers
- (12) 1/4-in. stainless steel flat washers
- (4) 3/8-16 x 7/8-in. stainless steel long bolts
- (8) 3/8-in. stainless steel split-lock washers
- (8) 3/8-in. stainless steel flat washers
- (2) 1/4-20 stainless steel flat head screws

**Tools and Materials Required**
- Standard tools, including a nut driver
- Appropriate 3/8-in. anchoring hardware (bolt, nut, and washer for rooftop mount) (customer-provided)
- A mechanical support to hold the cabinet in place while mounting

---

**To install the 4-in. plinth onto a concrete pad**

1. Install 3/8-in. concrete anchor nuts into the concrete pad following standard local practices. Refer to the plinth mounting dimensions below.

2. Secure the plinth with appropriate anchoring hardware. Ensure load spreading washers are oriented as illustrated. Torque hardware per anchor nut specifications.

3. Place the cabinet onto the 4 in. plinth and align the cabinet holes with the 4-in. plinth mounting holes.
4 Follow the steps described at the end of this section to access the plinth-to-cabinet hardware securing locations.

**WARNING**
The cabinet may tip until it is secured to the 4-in. plinth.

---

**To install the cabinet onto a rooftop mounting platform**

1 Install the rooftop mounting platform (designed appropriately for cabinet configuration weight) following standard local practices.

2 Place the cabinet onto the 4-in. plinth and align cabinet holes with the 4-in. plinth mounting holes.

3 Follow the steps described at the end of this section to access the plinth-to-cabinet hardware securing locations.

4 After the plinth is secured to the cabinet, position the cabinet onto the rooftop mounting platform. Secure the cabinet with 4-in. plinth to the rooftop mounting platform with the appropriate customer-provided 3/8-in. anchoring hardware (bolt, nut, and washer) applicable to configuration weight.

**WARNING**
The cabinet may tip until it is secured to the 4-in. plinth.

---

**Plinth-to-cabinet Hardware Securing Locations**

**To access the plinth-to-cabinet hardware securing locations for the MC-AR3 cabinet:**

1 Open the cabinet door.

2 Inside the cabinet, loosen the hardware securing the rear equipment mounting bracket to the cabinet.
Note  Do not remove the rear bracket from the Metro Cell or SAR-W.

3 Pull each Metro Cell or SAR-W down to allow access to the cabinet’s interior.

**WARNING**
Do not pull down on the RF cables.

4 Use a 5/32-in. pin-in-hex bit (included with cabinet) to remove the hardware securing the front and rear plinth access covers. Remove the plinth access covers.
5 Secure the cabinet to the plinth with 1 hardware stackup (included with the kit) in each corner: (1) 3/8-16 stainless steel bolt, (2) 3/8-in. stainless steel flat washers, (1) 3/8-in. stainless steel split-lock washer, and (1) 3/8-in. stainless steel nut). Torque hardware to 20 ft-lb.

6 Re-install and secure the front and rear plinth access covers. Torque hardware to 58 in-lb.

7 Re-position the cabinet equipment.

8 Secure a mechanical lifting device to both lifting tabs and lift the cabinet. It is recommended that 2 independent lifting devices be used to connect to the lifting hoist. See cabinet lifting section.

**WARNING**
The cabinet may tip until it is secured to the 4-in. plinth.

---

**To access the plinth-to-cabinet hardware securing locations for the MC-DBR3 cabinet:**

1 Open the rectifier door and then open the battery compartment door.

2 Use a 5/32-in. pin-in-hex bit (included with cabinet) to remove the hardware securing the front and rear plinth access covers. Remove the plinth access covers.
3. Secure the cabinet to the plinth with 1 hardware stackup (included with the kit) in each corner: (1) 3/8-16 stainless steel bolt, (2) 3/8-in. stainless steel flat washers, (1) 3/8-in. stainless steel split-lock washer, and (1) 3/8-in. stainless steel nut). Torque hardware to 20 ft-lb.

4. Re-install and secure the front and rear plinth access covers. Torque hardware to 58 in-lb.

5. Secure a mechanical lifting device to both lifting tabs and lift the cabinet. It is recommended that 2 independent lifting devices be used to connect to the lifting hoist. See cabinet lifting section.
Grounding

Tools and Materials Required

- Standard tools, including 7/16 in. nut driver
- Corrosion inhibiting, electrically conductive grease
- Customer-supplied ground cable with a 2-hole lug connector (1/4 in. diameter holes, 5/8 in. center-to-center spacing)
- Securing hardware (provided with cabinet)
- Grounding point or service that conforms to local codes and ordinances

≡≡

To ground the cabinet

1. Locate the exterior, unpainted grounding area of the cabinet.

2. Detach and retain the securing hardware.

3. Apply corrosion-inhibiting, electrically conductive grease to the unpainted grounding area.

4. Place the cable lug over the threaded holes and secure with retained hardware. Torque bolts to 54 in-lb.

Connecting RF Cables

Tools and Materials Required

- Standard tools
- 7/16-in. DIN connectorized, preterminated RF and GPS cables (customer-supplied)
To install RF cables

1. Test RF cables and antennas per local practices.
2. Install all antennas and route RF cables to the designated locations on the cabinet bulkheads.
3. Remove protective caps from antenna ports.
4. Install RF cables in locations shown below.

5. Tighten RF cable nuts and torque to 20 ft-lb.

*Note 1:* Route cables as shown to create a drip loop.

*Note 2:* For wall mount applications, ensure RF cables are equipped with a 90 degree connector.
**Batteries**

**WARNING**
High Energy Level! Failure to follow safety procedures could result in severe injury!
- When installing or servicing the batteries, use certified insulated tools to prevent electrical short circuit.

---

To install the batteries into the cabinet

**Important** Apply a generous amount of no-ox grease (provided with batteries) to all battery and intercell connectors. Install battery covers.

1. Open cabinet battery compartment.
2. Using a 7/16 in. nut driver, remove the 2 bolts securing the battery retention bracket. Remove the battery retention bracket.

3. Remove the battery covers from the negative terminal end of batteries 1 - 3. Refer to illustration below for battery string connection information.

---

![Battery Connection Diagram](image-url)

**80Ah Battery SAFT Tel X80 38 Cells**
SAFT PN: 80-94818-02

**TEMP PROBE**

**POS RET**

**NEG 48VDC**

Battery 1  Battery 2  Battery 3  Battery 4
4 Install battery cables to negative terminals as illustrated. Replace battery covers.

**Important** Ensure battery cables are bent downwards after installation to direct water away from battery terminals as illustrated in Step 9.
5 Position battery 1 as illustrated with positive battery terminal end facing forward.

6 Remove battery cover from positive terminal end of battery 1. Install positive battery cable from power shelf onto battery 1 positive terminal. Replace battery cover. Push battery 1 into position.
7 Position battery 2 as illustrated with positive battery terminal end facing forward.

8 Remove battery cover from positive terminal end of battery 1. Install the negative battery cable from battery 1 onto the positive battery terminal on battery 2. Replace battery cover. Push battery 2 into position.
9  Dress battery cable as illustrated.

Important:
Verify that the cable is also bent downward at the rear connection.
The cable should route into the trough between both battery covers to ensure it doesn’t get pinched between the batteries.

10  Position battery 3 as illustrated with positive battery terminal end facing forward.
11 Remove battery cover from positive terminal end of battery 3. Install the negative battery cable from battery 2 onto the positive battery terminal on battery 3. Replace battery cover. Push battery 3 into position.

12 Dress battery cable as illustrated.
13 Position battery 4 as illustrated with **negative** battery terminal end facing forward. Remove battery cover from positive terminal end of battery 4. Install the negative battery cable from battery 3 onto the positive battery terminal on battery 4. Replace battery cover.

**IMPORTANT** Orientation of battery 4 is reversed - negative battery terminal end faces forward.

14 Remove the battery cover from the negative terminal end of battery 4. Install the negative battery cable from the power shelf and the temp probe onto the battery 4 negative terminal. Replace battery cover.
15 Push battery 4 into position. Using a 7/16 in. nut driver, re-install the battery retention bracket and secure with the 2 bolts removed in Step 1. Torque to 85 in-lb.

Connecting AC Power

**WARNING**

Ground cabinet per “Grounding” Section (page 38) prior to connecting AC power.

**Tools and Materials Required**

- Standard tools and any tools to seal conduit
- 3/4-in. conduit for routing cables to the cabinet
- 3/4 NPT conduit fitting
- (2) 2 x 12AWG wire nuts
- (1) 3 x 12AWG wire nut
- Seals, gaskets, or fittings rated at NEMA 4 or IP65 for the conduit ports
- Outdoor-rated, air-tight sealant for conduit
To connect the cabinet to AC power

1. Use the Torx T15 security bit (included in the cabinet) to remove the 2 stainless steel 6–32x1/2-in. security screws securing the exterior j-box cover. Remove and retain the cover and hardware.

2. Remove the wing-nut securing the applicable blanking plug from the exterior j-box. Discard hardware.
3  Ensure j-box ground cable is connected with incoming AC and cabinet ground cables.

4  Connect the 3/4 NPT conduit fitting and 3/4-in. conduit to the external j-box.

5  Route the AC power cable through the conduit and into the external j-box. Use wire nuts to connect the AC cabinet wires to incoming AC power cable:
   - **110 VAC**
     - Live – Black
     - Neutral – White
     - Ground – Green

6  Position AC cabinet wires inside external j-box.
Reinstall the external j-box cover and secure with the 2 security screws. Hand-tighten screws.

### Connecting the Backhaul Fiber Cable

#### Tools and Materials Required

- Standard tools, including antistatic wrist strap and any tools to seal conduit
- Compression fitting sized for fiber cable diameter or conduit if used (customer provided)
- Cable ties for cable routing management
- SAR-W gland (provided with the cabinet)

≡≡ To connect the backhaul fiber cable

1. Remove the desired knockout and install the compression fitting (customer-supplied) as illustrated below.

2. Remove the nut and seal from the compression fitting and feed the fiber cable through the nut, seal, and fitting, and into the cabinet. Re-secure the seal and nut to the compression fitting. Do not tighten.

3. Swing down the SAR-W.

   a. Open the cabinet door.
b Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.

**Note** Do not remove the rear bracket from the Metro Cell or SAR-W.

4 Remove the SAR-W port gland. Connect the incoming backhaul fiber cable to Port 3 per the “DC, Data, and Alarm Wiring Diagram” located at the end of this installation manual.

5 Inside the cabinet, remove the nut and seal from the SAR-W gland and feed the fiber cable through it. Insert the fiber connector into the SFP on the SAR-W. Carefully secure the FullAXS connector onto the SAR-W. Reinstall the seal and nut after it’s fully seated and tighten as illustrated on the next page.

---

**WARNING**

Do not pull down on the RF cables.
**Note** Keep nut loose until correct cable length is established.

6 Secure the fiber cable to the cable management tray using cable ties. Ensure there is enough service loop for the SAR-W to pivot without stressing the fiber cable or the FullAXS SAR-W gland.
7 Reposition the SAR-W in its original orientation, ensuring all cables remain unobstructed.

8 Retighten the hardware securing the rear equipment bracket to the cabinet. Torque hardware to 30 in-lb.

9 Tighten the fiber cable compression fitting on the outside of the cabinet.

**Alarm Configuration**

*IMPORTANT Please refer to the Alcatel-Lucent OLCS website shown below for copies of the 7310 Metro Cell cabinet alarming procedures or contact your local representative.*

All 7310 Metro Cell cabinet alarming procedures can be downloaded from the following Alcatel-Lucent OLCS website location:

https://infoproducts.alcatel-lucent.com/aces/cgi-bin/dbaccessproddoc.cgi.edit?entryId=1-0000000003997&doctype=DOC

Refer to Model/Subgroup pull-down; select “7310 Metro Cell Cabinet”.
Cabinet Alarms (MC-DBR3 Only)

The GE-J2007003 L202 SPS rectifier shelf supports 9 binary alarm inputs with a common return (Pin 6). The signal assignment for alarm input connector J1 (located on the front face of the GE-J2007003 L202 SPS rectifier shelf) with the SPS841A_9COR_USB with factory default assignments is shown below.

### Galaxy Pulsar Edge SPS841A_9COR_USB

<table>
<thead>
<tr>
<th>User Level Description</th>
<th>Pin</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Configurable Alarm Input 9 - Ext Fan Fail (IN015; AUX 9)</td>
<td>10</td>
<td>External Fan Fail</td>
</tr>
<tr>
<td>User Configurable Alarm Input 8 - Air Conditioner Fail (IN014; AUX 8)</td>
<td>9</td>
<td>Air Conditioner Fail</td>
</tr>
<tr>
<td>User Configurable Alarm Input 7 - Battery Fail (IN013; AUX 7)</td>
<td>8</td>
<td>Battery Fail</td>
</tr>
<tr>
<td>User Configurable Alarm Input 6 - Retrieved Generator (IN012; AUX 6)</td>
<td>7</td>
<td>Retrieved Generator</td>
</tr>
<tr>
<td>Alarms 1 - 9: Return</td>
<td>6</td>
<td>Return for Alarms</td>
</tr>
<tr>
<td>User Configurable Alarm Input 5 - External DC Minor (IN011; AUX 5)</td>
<td>5</td>
<td>External DC Fail Minor</td>
</tr>
<tr>
<td>User Configurable Alarm Input 4 - External DC Major (IN010; AUX 4)</td>
<td>4</td>
<td>External DC Fail Major</td>
</tr>
<tr>
<td>User Configurable Alarm Input 3 - Door 2 Open (IN009; AUX 3)</td>
<td>3</td>
<td>Door 2 Open (Intrusion Level 2)</td>
</tr>
<tr>
<td>User Configurable Alarm Input 2 - SPD Fail (IN008; AUX 2)</td>
<td>2</td>
<td>Surge Protection Device Fail</td>
</tr>
<tr>
<td>User Configurable Alarm Input 1 - Door Open Alarm (IN007; AUX 1)</td>
<td>1</td>
<td>Door Open (Intrusion Level 1)</td>
</tr>
</tbody>
</table>

Note: Signal Assignments Defined For J2007003L202 J1

Metro Cell cabinet alarms are indicated below:

<table>
<thead>
<tr>
<th>Alarm</th>
<th>Pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surge Protect Fail</td>
<td>2</td>
</tr>
<tr>
<td>Door Open</td>
<td>1</td>
</tr>
</tbody>
</table>

The LAN port of the Pulsar Edge rectifier shelf controller is connected to SAR-W port 1/1/5, allowing network access to the functions of the Pulsar Edge controller.
The Pulsar Edge controller supports network access to almost all controller functions including all voltage and temperature readings, current alarms, and alarm history. It supports a web-based user interface using standard browsers like Microsoft Internet Explorer®. It can provide plant alarm and control information to a distributed or centralized Network Operation Center (NOC) using the Simple Network Management Protocol (SNMP) or the Transaction Machine Language (TL1), which allow the Pulsar Edge controller to provide alarm information to the NOC for integrated network management. The Pulsar Edge controller provides network access and control capability for users under the HTTP, Telnet, FTP, SMTP, SNMP, and TL1 protocols. Refer to the Galaxy Pulsar Edge System Controller Product Manual Comcode CC848836981 for further information.

**Door Open Alarm (MC-DBR3 Only)**

The rectifier compartment door is equipped with a plunger-type door switch to report door alarms. After the rectifier compartment door is opened, an alarm is activated and returned to the NOC from the SPS rectifier shelf over the SAR-W.

The door alarm can be defeated for maintenance purposes. To cancel the alarm, pull the door switch plunger out to its defeat position.

![Door Alarm in Defeat (Out) Position](image)

The rectifier compartment door is interlocked with the equipment compartment and battery compartment door. The rectifier door must be opened first and closed last. This door interlocking serves as the door alarm for these other compartments.

**SPD Fail Alarm (MC-DBR3 Only)**

The AC surge protective device (SPD) is equipped with an alarm relay to indicate a failed or damaged SPD that requires replacement.

**Note** The alarm circuitry in the SPD is fail-safe and requires AC power to function. An SPD fail alarm will be present during an AC failure and does not indicate that the SPD requires replacement.
Commissioning the Equipment

## Rectifiers and Alarms

To commission the DC rectifiers and alarms

1. Open the cabinet door.
2. Insert each rectifier into the appropriate slot in the DC power plant. Use a Phillips screwdriver to tighten the captive screws on each rectifier.

**WARNING**

Ensure there is no gap between rectifier face and rectifier shelf.
3 Observe each rectifier — a green LED light indicates the cabinet is powered and operating normally.

4 Observe DC power shelf — green LED lights on the DC power plant indicate no alarms are present.

5 Refer to the DC power plant manufacturer’s manual (included with the cabinet) for further information on the equipment commissioning process.

**SAR-W**

To commission the SAR-W

1 Open the cabinet door.
2 Use a torx driver to remove the 2 torx screws securing the access cover on the SAR-W. Remove the access cover.

3 Refer to the SAR-W manufacturer's manual for information on how to conduct the equipment commissioning process.

**Metro Cell**

**To commission the Metro Cell**

1 Open the cabinet door.
   a Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.
Note Do not remove the rear bracket from the Metro Cell.

b Using the attached handle, pull down the Metro Cell.

WARNING
Do not pull down on the RF cables.

2 Use a torx wrench to remove the 3 torx security screws securing the access door on the Metro Cell. Open the access door.
3 Refer to the Metro Cell manufacturer’s manual for information on how to finalize the equipment commissioning process.

**Connecting Power to Metro Cell 2 and External NID**

**NID Electrical Specifications**

NID maximum power = 25W

**Tools and Materials Required**

- Small, flat blade screwdriver
- 24mm and 29mm wrenches

**WARNING**

The cabinets and cables are live once the 48VDC power is applied.

---

To connect power to Metro Cell 2 and the external NID

1. Remove the fuses from the power shelf.

<table>
<thead>
<tr>
<th>Position</th>
<th>Fuse Value</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.5A</td>
<td>MCO#1</td>
</tr>
<tr>
<td>2</td>
<td>5A</td>
<td>SAR-W</td>
</tr>
<tr>
<td>3</td>
<td>7.5A</td>
<td>MCO#2</td>
</tr>
<tr>
<td>4</td>
<td>1.5A</td>
<td>NID (External)</td>
</tr>
<tr>
<td>5</td>
<td>1.5A</td>
<td>Fan Kit (Optional)</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>Unused</td>
</tr>
</tbody>
</table>

2. Locate the desired power feed in-line connector. One connector is marked “MCO#2” and the other is marked “NID”.
3 Remove the compression nut and tube.

4 Remove the sealing plug from the in-line connector and discard.

5 Select the correct combination of seals for the cable type used.
   - Use both seals for a cable diameter range of 5 - 8mm.
   - Use only the outer seal for a cable diameter range of 8 - 13mm.

6 Insert the power cable through the nut, selected seal(s), and tube.

7 Install the electrical connections onto the screw terminal block.
   - RED (L) is -48VDC.
   - BLACK (N) is RETURN

8 Reassemble the in-line connector.

9 Ensure the assembly is tightened to 22 in-lb. and provides a good cable entry seal.
Associated Kits

<table>
<thead>
<tr>
<th>Name</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcatel-Lucent 7310 DC Metro Cell AWS (B4) Kit</td>
<td>3MV00489AC</td>
</tr>
<tr>
<td>Alcatel-Lucent 7310 AC Metro Cell AWS (B4) Kit</td>
<td>3MV00489AB</td>
</tr>
</tbody>
</table>

Maintenance

**DANGER**

Any maintenance or service involving electrical power to or inside the cabinet must be performed by a qualified, licensed electrician.

**Preventive Maintenance**

*Note* Maintenance schedule is determined by local practices, cabinet location, and environmental conditions.

Perform the following periodic maintenance on the cabinet:

- Wipe down the exterior if needed.
- Blow or vacuum out all vents and drain holes.
- Inspect and replace all cables with visible damage.
- Inspect all electrical connections.
- Ensure all electrical safety covers are in place.
- Check all bracket fasterers and tighten bolts where needed.

Field Replacement

**SAR-W**

To replace the SAR-W

1. Open the cabinet door.
   - Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.
**Note** Do not remove the rear bracket from the SAR-W.

1. Pull down the SAR-W.

2. Disconnect the power, fiber, ground, and Ethernet cables. Remember orientation for cable reattachment.
3 Disconnect the tether/link from the SAR-W.

4 Return the SAR-W to its upright position inside the cabinet. Remove the 2 screws securing the retainer bracket.
5 Carefully tip the SAR-W forward and lift out of the cabinet.

6 Position the SAR-W on a flat surface. Use a 13mm socket to remove the 2 bolts securing the front mounting bracket.
7 Use a 13mm socket to remove the 2 bolts securing the rear mounting bracket.

8 Install the front and rear mounting brackets onto the new SAR-W and torque bolts to industry standards.

9 Install the new SAR-W into the cabinet and reconnect all hardware and cables by reversing the previous SAR-W removal steps.

**Metro Cell**

≡≡ To replace the Metro Cell

1 Open the cabinet door.
   a Inside the cabinet, use a 3/16-in. Allen wrench to loosen the hardware securing the rear equipment mounting bracket to the cabinet.

**Note** Do not remove the rear bracket from the Metro Cell.
b Using the attached handle, pull down the Metro Cell.

**WARNING**
Do not pull down on the RF cables.

2 Disconnect the 2 Metro Cell antenna cables and the GPS cable from the Metro Cell. Remember orientation for cable reattachment.

3 Cut the 2 sets of 3 cable ties securing the RF cables.
4 Disconnect the ground and DC power cables from the Metro Cell.

5 Use a torx wrench to remove the 3 torx security screws securing the access door on the Metro Cell. Open the access door and disconnect the fiber cable and remove from gland. Close and resecure the access door.
6 Disconnect the tether from the Metro Cell.

7 Return the Metro Cell to its upright position inside the cabinet. Remove the 2 screws securing the retainer bracket.
8 Carefully tip the Metro Cell forward and lift out of the cabinet.

---

**WARNING**
The Metro Cell is now unsecured.
9 Position the Metro Cell on a flat surface. Use a Phillips screwdriver to remove the 5 stainless steel M5 flathead screws and a 13mm socket to remove the 2 stainless steel M8 x 30mm bolts securing the front mounting bracket.

10 Use a 13mm socket to remove the 2 stainless steel M8 x 14mm bolts securing the rear mounting bracket.

11 Install the front mounting bracket onto the new Metro Cell and secure with the 5 stainless steel M5 flathead screws and the 2 stainless steel M8 x 30mm bolts. Install the rear mounting bracket onto the new Metro Cell and secure with the 2 stainless steel M8 x 14mm bolts. Torque all bolts to 140-160 in-lb. Hand-tighten screws.

12 Install the new Metro Cell into the cabinet and reconnect all hardware and cables by reversing the previous removal steps.
**FRU Kits/MC-AR3 Cabinet**

<table>
<thead>
<tr>
<th>Description</th>
<th>ALU Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Metro Cell 1 RF Cable to Diplexer (TXRX1) (Not Shown)</td>
<td>PURC-2000002880</td>
</tr>
<tr>
<td>2 Metro Cell 1 RF Cable to Diplexer (TXRX2) (Not Shown)</td>
<td>PURC-2000002881</td>
</tr>
<tr>
<td>3 Metro Cell 1 GPS Cable to Splitter (Not Shown)</td>
<td>PURC-2000002884</td>
</tr>
<tr>
<td>4 Low Frequency RF Cable, Diplexer to Bulkhead (Not Shown)</td>
<td>PURC-2000002886</td>
</tr>
<tr>
<td>5 High Frequency RF Cable, Diplexer to Bulkhead (Not Shown)</td>
<td>PURC-2000002895</td>
</tr>
<tr>
<td>6 GPS Cable, Splitter to Bulkhead (Not Shown)</td>
<td>PURC-2000002896</td>
</tr>
<tr>
<td>7 Fiber Cable, SAR-W to Metro Cell (Not Shown)</td>
<td>PURC-2000002902</td>
</tr>
<tr>
<td>8 Cabinet Door Handle</td>
<td>PURC-2000002904</td>
</tr>
<tr>
<td>9 Metro Cell Handle</td>
<td>PURC-2000002910</td>
</tr>
<tr>
<td>10 Metro Cell Bracket</td>
<td>PURC-2000003081</td>
</tr>
<tr>
<td>11 SAR-W Bracket</td>
<td>PURC-2000003082</td>
</tr>
<tr>
<td>12 Lifting Tabs</td>
<td>PURC-2000002913</td>
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## FRU Kits/MC-AR3 Cabinet (continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>ALU Part No.</th>
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<tbody>
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<td>13 Diplexer</td>
<td>PURC-2000002914</td>
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<tr>
<td>14 GPS Splitter</td>
<td>PURC-2000002915</td>
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<tr>
<td>15 Cabinet Door</td>
<td>PURC-2000003083</td>
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<tr>
<td>16 Door Alarm Harness</td>
<td>PURC-2000002921</td>
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<tr>
<td>17 Techno 4-way Connector</td>
<td>PURC-2000003084</td>
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<tr>
<td>18 Techno/PDU Power Cable (Not Shown)</td>
<td>PURC-2000002923</td>
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<tr>
<td>19 AC Metro Cell</td>
<td>109805176</td>
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<tr>
<td>20 AC SAR-W</td>
<td>3HE07349AA</td>
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<td>21 AC PDU (Not Shown)</td>
<td>849174040</td>
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<tr>
<td>22 Alarm Cable (Not Shown)</td>
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### FRU Kits/MC-DBR3 Cabinet

<table>
<thead>
<tr>
<th>Field Replaceable Items</th>
<th>Description</th>
<th>ALU Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Metro Cell 1 RF Cable to Diplexer (TXRX1) (Not Shown)</td>
<td>PURC-2000002880</td>
</tr>
<tr>
<td>2</td>
<td>Metro Cell 1 RF Cable to Diplexer (TXRX2) (Not Shown)</td>
<td>PURC-2000002881</td>
</tr>
<tr>
<td>3</td>
<td>Metro Cell 1 GPS Cable to Splitter (Not Shown)</td>
<td>PURC-2000002884</td>
</tr>
<tr>
<td>4</td>
<td>Low Frequency RF Cable, Diplexer to Bulkhead (Not Shown)</td>
<td>PURC-2000002886</td>
</tr>
<tr>
<td>5</td>
<td>High Frequency RF Cable, Diplexer to Bulkhead (Not Shown)</td>
<td>PURC-2000002895</td>
</tr>
<tr>
<td>6</td>
<td>GPS Cable, Splitter to Bulkhead (Not Shown)</td>
<td>PURC-2000002896</td>
</tr>
<tr>
<td>7</td>
<td>GE DC Power Plant</td>
<td>PURC-2000002897</td>
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</table>
## FRU Kits/MC-DBR3 Cabinet (continued)

<table>
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</tr>
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<tbody>
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<td>Description</td>
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<td>8 GE DC Power Plant Controller (Not Shown)</td>
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</tr>
<tr>
<td>9 GE DC Power Plant Rectifier (Not Shown)</td>
<td>PURC-2000002899</td>
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<tr>
<td>10 AC SPD</td>
<td>PURC-2000002900</td>
</tr>
<tr>
<td>11 DC SPD</td>
<td>PURC-2000002901</td>
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<tr>
<td>12 Fiber Cable, SAR-W to Metro Cell (Not Shown)</td>
<td>PURC-2000002902</td>
</tr>
<tr>
<td>13 Techno Metro Cell 2 Connector Kit (Not Shown)</td>
<td>PURC-2000002903</td>
</tr>
<tr>
<td>14 Cabinet and Battery Compartment Door Handle</td>
<td>PURC-2000002904</td>
</tr>
<tr>
<td>15 Rectifier Door Handle</td>
<td>PURC-2000002905</td>
</tr>
<tr>
<td>16 Cabinet Door</td>
<td>PURC-2000003078</td>
</tr>
<tr>
<td>17 Rectifier Door</td>
<td>PURC-2000003079</td>
</tr>
<tr>
<td>18 Battery Compartment Door</td>
<td>PURC-2000003080</td>
</tr>
<tr>
<td>19 GE Battery Temp Probe (Not Shown)</td>
<td>PURC-2000002909</td>
</tr>
<tr>
<td>20 Metro Cell Handle</td>
<td>PURC-2000002910</td>
</tr>
<tr>
<td>21 Metro Cell Bracket</td>
<td>PURC-2000003081</td>
</tr>
<tr>
<td>22 SAR-W Bracket</td>
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<tr>
<td>23 Lifting Tabs</td>
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<tr>
<td>24 Diplexer</td>
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<tr>
<td>25 GPS Splitter</td>
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</tr>
<tr>
<td>26 DC Metro Cell</td>
<td>109805713</td>
</tr>
<tr>
<td>27 DC SAR-W</td>
<td>3HE07349AA</td>
</tr>
<tr>
<td>28 Rectifier Door Alarm Switch</td>
<td>PURC-2000002918</td>
</tr>
<tr>
<td>29 Alarm Cable (Not Shown)</td>
<td>PURC-2000002919</td>
</tr>
</tbody>
</table>
RF Wiring Diagram — MC-AR3/MC-DBR3 Cabinet

FIT N-TYPE 50 OHM TERMINATOR IN DC BLOCK PORT WHEN MCO #2 IS NOT FITTED.

100 MHz WHEN MCO #2 IS NOT FITTED.

LHS UPPER BULKHEAD

RHS BULKHEAD

FRT BULKHEAD

3PS SPLITTER

DC PASS

TX/RX2

TX/RX1

27/16' 50 OHM TERMINATOR TO

REAR DIPLER OR

** OPTION FIELD INSTALLED

MCO #1

MCO #2

1

2
AC Wiring Diagram — MC-DBR3 Cabinet
DC, Data, and Alarm Wiring Diagram — MC-DBR3 Cabinet