Enclosed is a Rack for your HC900 Controller.

Racks are available in 4-slot, 8-slot, and 12-Slot versions. Racks are interchangeable between the Controller rack and an I/O expansion rack (C50 CPU only) - Figure 1. 8 and 12 slot I/O racks (900R08 and 900R12) can be modified with additional slots for optional Reserve Power Supply and Power Status Module.

C50: I/O rack has a Scanner 1 module  
C70R: I/O rack has a Scanner 2 Module.

Redundant CPU Rack:
Holds two redundant C70R CPUs, two Power Supplies, and one Redundancy Switch Module (RSM). The C70R Redundant CPU Rack does not support any I/O Modules and cannot be used with C30 or C50 CPU’s.

Figure 1 Rack Configurations
Rack Orientation and Mounting

Racks must be mounted as indicated in illustrations throughout this instruction, so as to provide for vertical airflow through the racks. That is, racks must never be mounted vertically, and must never be mounted with the backplane horizontal (for example, flat on a horizontal panel or tabletop). Environmental specifications apply only to the normal mounting configuration.

Rack dimensions, including overall dimensions and patterns for drilled holes for mounting, are given in Figure 2, Figure 3 and Figure 4. Vertical spacing of racks, which is required for rack ventilation and for routing wires, is shown in Figure 5.
Figure 4 Redundant CPU Rack Dimensions

Figure 5 Vertical Spacing of Racks (all models)
**Procedure**

Use the following procedure to install the specific rack supplied.

**Table 1 Redundant Controller CPU Module installation or replacement**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
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<tbody>
<tr>
<td>1</td>
<td>Using the dimensions in Figure 2, 3, and 4 as a guide, mark the locations for rack mounting in the enclosure for the top holes in the rack.  &lt;br&gt;<strong>CAUTION:</strong>  &lt;br&gt;When drilling holes, prevent metal flakes from falling into the rack, or onto any surface within the electrical cabinet.</td>
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<td>2</td>
<td>Aluminum grounding bars for I/O module wiring are <strong>optional</strong>. They can be mounted at top, at bottom, or at top and bottom of the rack, as indicated at right. &lt;br&gt;If grounding bars are included, attach them with two M3 screws (supplied with grounding bars in plastic bag). &lt;br&gt;<strong>Note:</strong> The plastic bag also includes four M4 screws for attaching the grounding wire lugs, which are attached later. &lt;br&gt;Attach the M4 screws loosely to the grounding bars for safe keeping.</td>
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<tr>
<td>3</td>
<td>Hang the rack in the enclosure on the top screws. &lt;br&gt;Start all screws in the bottom of the rack and then tighten all screws. &lt;br&gt;Note: You may find it easier to postpone this step until after all components have been installed in the rack.</td>
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<tr>
<td>4</td>
<td>Repeat for each rack in your system.</td>
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