This quick look guide is meant to be a supplement to the CDG requirements and should be used in conjunction with the CDG. Please understand that any direction or suggestion coming from TSA is advisory only, in no way shall obligate TSA to fund any design or construction, and should be approved by the airport or airline responsible for payment of such design or construction.
NOTES BY SYMBOL "O"

1. PREFERRED LOCATION OF SURFACE OR FLUSH DEVICE.
2. ACCEPTABLE LOCATION OF SURFACE OR FLUSH DEVICE WITHIN HATCHED AREA.
3. ACCEPTABLE ALTERNATE LOCATION OF SURFACE OR FLUSH DEVICE SERVING AREA IF PREFERRED LOCATION EXCEEDS 13-03 CORR LENGTH.
4. PREFERRED LOCATION OF POWER POLE COORDINATE POWER POLE LOCATION WITH ANY INTERFEROING shading equipment SUCH AS LEAD FRAMES, DIFFUSERS, PULSES, SPRINKLER HEADS, ETC.

X-RAY DEVICE LOCATIONS

NOTES:
1. EQUIPMENT SHOWN REPRESENTS TWO DIFFERENT X-RAY MANUFACTURERS FOR EXAMPLE OF OUTLET PLACEMENT. EACH CHECKPOINT TYPICALLY INCLUDES ONLY ONE MANUFACTURER.
2. EACH EQUIPMENT LOCATION SHALL UTILIZE EITHER FLUSH OUTLET OR POWER POLE BUT NOT BOTH TYPES OF POWER/OUTLET DEVICES (EXCEPTION DEPENDS ON AIRPORT BUILDING CONSTRUCTION).
3. IT IS RECOMMENDED THAT THE PRIVATE SCREENING ROOM, IT ROOM, AND THE ITO POWER BE BUILT INTO THE SPACE OF THE AIRPORT.
4. POWER/OUTLET DEVICES SHOWN ARE REPRESENTATIVE OF THE TYPICAL OUTLETS REQUIRED. REFER TO THE CHECKPOINT DESIGN GUIDE FOR ALTERNATIVE TYPES OF POWER/OUTLET DEVICES (POWER POLES, MODULAR BOXES, ETC.)
5. ALL X-RAY LINES FROM THE X-RAY OUTLET MAY ROUTE THROUGH THE IT ROOM IF NECESSARY.

SPECIAL SCOPE NOTE:
Please note that any costs associated with the planning, design and/or other aspects of this project are the sole responsibility of the airport and/ or airline and the TSA will not be liable for any such costs or reimbursement for any aspect of the project.

SPECIAL STATEMENT:
ALL IT ROOMS, I/O ROOMS AND PRIVATE SCREENING ROOMS ARE NON-LEASED SPACE. ALL IT ROOMS NEED TO BE CLEANED THROUGH LOCAL/TA NO IT AND TSA NO OFFICE OF REAL ESTATE FOR AWARENESS. THE LOCAL TSA IS RESPONSIBLE TO MAKE ALL NOTIFICATIONS.
NOTES BY SYMBOL "O"

1. Preferred location of surface or flush device.
2. Acceptable location of surface or flush device within hatched area.
3. Acceptable alternate location of surface or flush device when preferred location exceeds 13-ft cord length.
4. Preferred location of power pole. Coordinate power pole location with any interfering ceiling equipment such as lamp fixtures, air handlers, grilles, sprinkler heads, etc.

X-RAY DEVICE LOCATIONS

TSA CHECKPOINT DATA TYPOLGY – IDSS CT DETECT 1000
NOTES BY SYMBOL "O"

1. PREFERRED LOCATION OF SURFACE OR FLUSH DEVICE
2. ACCEPTABLE LOCATION OF SURFACE OR FLUSH DEVICE WITHIN HATCHED AREA
3. ACCEPTABLE ALTERNATE LOCATION OF SURFACE OR FLUSH DEVICE WITHIN HATCHED AREA IF PREFERRED LOCATION EXCEEDS 13'-0" CORD LENGTH
4. PREFERRED LOCATION OF POWER POLE COORDINATE POWER POLE LOCATION WITH ANY INTERFACING CEILING EQUIPMENT SUCH AS LIGHT FITTINGS, DUCTS, GRILLES, SPRINKLER HEADS, ETC.

X-RAY DEVICE LOCATIONS

SPECIAL SCOPE NOTE:
PLEASE NOTE THAT ANY COSTS ASSOCIATED WITH THE PLANNING, DESIGN AND/OR OTHER ASPECTS OF THIS PROJECT ARE THE SOLE RESPONSIBILITY OF THE AIRPORT AND/OR AIRLINE AND THE TSA WILL NOT BE LIABLE FOR ANY COSTS OR REIMBURSEMENT FOR ANY ASPECT OF THIS PROJECT.

SPECIAL FIRE NOTE:
ALL P 1 ROOMS, I/O ROOMS AND PRIVATE SCREENING ROOMS ARE NON-LEASED SPACE. ALL P 1 ROOMS NEED TO BE CLEARED THROUGH LOCAL TO THE IF AND THE TSA HAS OFFICE OF REAL ESTATE FOR AWARENESS. THE LOCAL TSA IS RESPONSIBLE TO MAKE ALL NOTIFICATIONS.

NOTES:
1. EACH EQUIPMENT LOCATION SHALL UTILIZE EITHER FLOOR OUTLETS OR POWER POLES, BUT NOT BOTH TYPES OF POWER/SATA DEVICES (SELECTION DEPENDS ON AIRPORT BUILDING CONSTRUCTION).
2. IT IS RECOMMENDED THAT THE PRIVATE SCREENING ROOM, IF ROOM, AND THE STD ROOM BE BUILT INTO THE SPACE OF THE AIRPORT.
3. POWER/SATA DEVICES SHOWN ARE REPRESENTATIVE OF THE TYPICAL OUTLETS REQUIRED. REFER TO THE CHECKPOINT DESIGN GUIDE FOR ALTERNATIVE TYPES OF POWER/SATA DEVICES (POWER POLES, WALL BOXES, ETC.).
4. ALL POWER LINES FROM THE FLOOR OUTLET MAY ROUTE THRU THE IT ROOM IF NECESSARY.

U.S. DEPARTMENT OF
HOMELAND SECURITY
TSA CHECKPOINT DATA TYPOLOGY – ANALOGIC CT CONNECT

REVISION 19 – ISSUED MAY 10, 2018
NOTE:
1. Up to 8 208/240V-20 or 30A circuits per MOG sets. Power supply conduit should be installed for future equipment deployments.
2. Power supply will be an issue when adding approximately 100amps per lane. Power supply in the vicinity of the checkpoint should be verified and required upgrades planned. This includes but is not limited to additional room for transformers, distribution panels and upgrades to facilitate electrical service.
3. Verify outlet device type for dedicated circuits with OEM vendors, TYP.
SPECIAL SCOPE NOTE:
PLEASE NOTE THAT ANY COSTS ASSOCIATED WITH THE PLANNING, DESIGN AND/OR OTHER ASPECTS OF THE PROJECT ARE THE SOLE RESPONSIBILITY OF THE AIRPORT AND/OR AIRLINE AND THE TSA WILL NOT BE LIABLE FOR ANY COSTS OR REIMBURSEMENT FOR ANY ASPECT OF THE PROJECT.

SPECIAL NOTE:
ALL 110 VOLT ROOMS AND PRIVATE SCREENING ROOMS ARE NON-LEASED SPACE. ALL FOR ENSURE THAT THE SCREENING ROOM IS PROPERLY USED AS A LEASED SPACE. THE LOCAL TSA IS RESPONSIBLE FOR MAKING ALL NOTIFICATIONS.

STANDARD POWER/DATA LAYOUT FOR AUTOMATED SCREENING LINES

NOTES:
1. EQUIPMENT SHOWN REPRESENTS TWO DIFFERENT X-RAY MANUFACTURERS FOR EXAMPLE OF OUTLET PLACEMENT. EACH CHECKPOINT TYPICALLY INCLUDES ONLY ONE MANUFACTURER.
2. EACH EQUIPMENT LOCATION SHALL INCLUDE EITHER BLOWER OUTLET OR POWER POLES, BUT NOT BOTH TYPES OF POWER/DATA OUTLETS DEPENDING ON AIRPORT BUILDING CONSTRUCTION.
3. IT IS RECOMMENDED THAT THE PRIVATE SCREENING ROOM, 110 VOLT ROOM, AND THE SED POOL BE BUILT INTO THE SPACE OF THE AIRPORT.
4. POWER/DATA OUTLETS SHOWN ARE REPRESENTATIVE OF THE TYPICAL OUTLETS REQUIRED. REFER TO THE CHECKPOINT DESIGN GUIDE FOR ALTERNATIVE TYPES OF POWER/DATA OUTLETS (POWER POLES, MODULAR KITS, ETC.)
5. WALLS REFER TO AUTOMATED SCREENING LINES.
6. ON SCREEN REGULATION, I/O ROOM TO MAKE 1-4 WORK STATIONS PER LANE ROUNDED UP.
7. ALL SIGNALS SHOWN TO BE LOCATED IN THE TSA IT ROOM. PROVIDE 2 X CAT 6 DATA CABLE FROM ALL SLOTS TO THE TSA IT GATEWAY FOR FUTURE USE.
8. PROVIDE GENERAL CONVENIENCE OUTLETS IN THE BEGINNING, MIDDLE AND END OF PASSenger QUEUE.
9. LOCATION OF THE SED TERMINAL WILL BE AT BEGINNING OF THE PASSenger QUEUE.
10. AUTOMATIC AND TASK INFRASTRUCTURE SHALL BE INSTALLED BASED ON THE TSA REQUIREMENTS AS SELECTED BY THE AIRPORT AUTHORITY.

TSA CHECKPOINT DATA TYPOLGY - VI - CENTRALIZED SERVER

U.S. DEPARTMENT OF HOMELAND SECURITY

REVISION 19 - ISSUED MAY 10, 2018

SHEET 20

[Diagram of standard power/data layout for automated screening lines]
**NOTE:**

1. UP TO 6 208/240V-20 OR 30A CIRCUITS PER MOD SETS. POWER SUPPLY CONDUIT SHOULD BE INSTALLED FOR FUTURE EQUIPMENT DEPLOYMENTS.

2. POWER SUPPLY WILL BE AN ISSUE WHEN ADDING APPROXIMATELY 100AMPS PER LANE. POWER SUPPLY IN THE VICINITY OF THE CHECKPOINT SHOULD BE VERIFIED AND REQUIRED UPGRADES PLANNED. THIS INCLUDES BUT IS NOT LIMITED TO ADDITIONAL ROOM FOR TRANSFORMERS, DISTRIBUTION PANELS AND UPGRADES TO FACILITY ELECTRICAL SERVICE.

3. VERIFY OUTLET DEVICE TYPE FOR DEDICATED CIRCUITS WITH OEM VENDOR, TYP.

### Table: Power Supply Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>208/240V-20 or 30A Circuits</td>
<td>Power Supply Provided by Vendor</td>
</tr>
<tr>
<td>Additional Transformers and Distribution Panels</td>
<td>Required</td>
</tr>
<tr>
<td>Electrical Uplgrades</td>
<td>Noted</td>
</tr>
</tbody>
</table>

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**TSA CHECKPOINT ELECTRICAL DEVICES – SCARABEE SYSTEMS**

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**U.S. DEPARTMENT OF HOMELAND SECURITY**

**REVISION 19 – ISSUED MAY 10, 2018**

**SHEET 22**
SPECIAL SCOPE NOTE
PLEASE NOTE THAT ANY COSTS ASSOCIATED WITH THE PLANNING, DESIGN AND/OR OTHER ASPECTS
OF THIS PROJECT ARE THE SOLE RESPONSIBILITY OF THE AIRPORT AND/OR AIRLINE AND TSA
WILL NOT BE LIABLE FOR ANY COSTS OR REIMBURSEMENT FOR ANY ASPECT OF THE PROJECT.

SPECIAL IT NOTE
ALL IT ROOMS, I/O ROOMS AND PRIVATE SCREENING ROOMS ARE NON-LEASED SPACE. ALL IT
ROOMS NEED TO BE CLEANED THROUGH LOCAL IT'S NO IT AND TSA NO OFFICE OF REAL ESTATE
FOR AWARENESS. THE LOCAL TSA IS RESPONSIBLE TO MAKE ALL NOTIFICATIONS.

NOTES:
1. EQUIPMENT SHOWN REPRESENTS TWO DIFFERENT X-RAY MANUFACTURERS FOR EXAMPLE OF OUTLET PLACEMENT.
2. EACH CHECKPOINT TYPICALLY INCLUDES ONLY ONE MANUFACTURER.
3. EACH EQUIPMENT LOCATED SHALL USE EITHER FLOOR OUTLETS OR POWER POLES, BUT NOT BOTH TYPES OF
   POWER/ DATA DEVICES (SELECTION DEPENDS ON AIRPORT BUILDING CONSTRUCTION).
4. IT IS RECOMMENDED THAT THE PRIVATE SCREENING ROOM I/O ROOM, AND THE I/O POOL ALL BE HIDDEN INTO
   THE SPACE OF THE AIRPORT.
5. POWER/ DATA DEVICES SHOWN ARE REPRESENTATIVE OF THE TYPICAL OUTLETS REQUIRED, REFER TO THE CHECKPOINT
   DESIGN GUIDE FOR ALTERNATIVE TYPES OF POWER/ DATA DEVICES (POWER POLES, MODULAR BOXES, ETC.)
6. "I/O" REFERS TO AUTOMATED SCREENING LINES.
7. ON SCREEN RESOLUTION, I/O ROOM TO MAKE SURE WORK SPACING PER LANE ROUNDED UP.
8. ALL POWER SOURCES TO BE LOCATED IN THE TSA I/O ROOM. PROVIDE 2 CAT 6 DATA CABLES FROM ALL SEPARATE
   SENSORS TO THEさら FASTEN FOR FUTURE USE.
9. PROVIDE GENERAL CONVENIENCE OUTLETS IN THE BEGINNING, MIDDLE AND END OF PASSENGER QUEUE.
10. LOCATION OF THE E-GATE TURNSTILES WILL BE AT BEGINNING OF THE PASSENGER QUEUE.
11. AUTOMATIC WARRIOR INFRASTRUCTURE SHALL BE INSTALLED BASED ON THE OEM REQUIREMENTS AS SELECTED BY
   THE AIRPORT AUTHORITY.

U.S. DEPARTMENT OF HOMELAND SECURITY
REVIEW 19 - ISSUED MAY 10, 2018
TSA CHECKPOINT ELECTRICAL DEVICES - RAPISCAN SYSTEMS
SPECIAL NOTE
PLEASE NOTE THAT NO COSTS ASSOCIATED WITH THE PLANNING, DESIGN AND/OR OTHER ASPECTS OF THE PROJECT ARE THE SOLE RESPONSIBILITY OF THE AIRPORT AND/OR AIRLINE AND TSA WILL NOT BE LIABLE FOR ANY COSTS OR REIMBURSEMENT FOR ANY ASPECT OF THE PROJECT.

SPECIAL IT NOTE
ALL IT ROOMS, I/O ROOMS AND PRIVATE SCREENING ROOMS ARE NOT LED SPACE. IT ROOMS TO BE CLEARED THROUGH LIBRARY OR IT AND TSA AND OFFICE OF REAL ESTATE. FOR AWARENESS, THE LOCAL TSA IS RESPONSIBLE TO MAKE ALL NOTIFICATIONS.

STANDARD POWER/DATA LAYOUT FOR AUTOMATED SCREENING LINES

NOTES:
1. EQUIPMENT SHOWN REPRESENTS TWO DIFFERENT X-RAY MANUFACTURERS. FOR EXAMPLE OF OUTLET PLACEMENT, EACH CHECKPOINT TYPICALLY INCLUDES ONLY ONE MANUFACTURER.
2. EACH EQUIPMENT LOCATION SHALL UTILIZE EITHER FLOOR OUTLET OR POWER POLE, BUT NOT BOTH TYPES OF POWER/DATA CABLES (SECURITY DEPENDS ON AIRPORT BUILDING CONSTRUCTION).
3. IT IS RECOMMENDED THAT THE PRIVATE SCREENING ROOM, I/O ROOM, AND THE STG ROOM BE BUILT INTO THE SPACE OF THE AIRPORT.
4. POWER/DATA CABLES SHOWN ARE REPRESENTATIVE OF THE TYPICAL OUTLETS REQUIRED. REFER TO THE CHECKPOINT DESIGN GUIDE FOR ALTERNATIVE TYPES OF POWER/DATA CABLES (POWER POLE, MODULAR NOVEL, ETC).
5. "ALL" REFERS TO AUTOMATED SCREENING LANES.
6. ON SCREEN SOLUTION, I/O ROOM TO HAVE 1.5 WORK STATIONS PER LANE ROUNDUP.
7. ALL I/ORooms TO BE LOCATED IN THE TSA IT ROOM. PROVIDE 2 CAT 6 DATA CABLES FROM ALL I/O TO IT TO CABINETS FOR FUTURE USE.
8. PROVIDE CENTRAL CONVEYOR OUTLETS IN THE BEGINNING, MIDDLE AND END OF PASSENGER QUEUE.
9. LOCATION OF THE E-SCREEN POINTS WILL BE AT BEGINNING OF THE PASSENGER QUEUE.
10. AUTOMATIC MATE TUBE INFRASTRUCTURE SHALL BE INSTALLED BASED ON THE CSA REQUIREMENTS AS SELECTED BY THE AIRPORT AUTHORITY.

TSA CHECKPOINT DATA TYPOLOGY - RS - CENTRALIZED SERVER

U.S. DEPARTMENT OF HOMELAND SECURITY
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<table>
<thead>
<tr>
<th>OUTLET</th>
<th>CABLE REQUIREMENTS</th>
<th>CABLE DESTINATION</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT X-RAY OUTLET - A</td>
<td>2 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>FRONT X-RAY OUTLET - B</td>
<td>2 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>REAR X-RAY OUTLET - B</td>
<td>6 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>AVS/ETD/BLS/AVS - C</td>
<td>4 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>SINGLE LANE WALL - D</td>
<td>4 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>PRIVATE SCREENING ROOM - E</td>
<td>3 x CAT6</td>
<td>TSA IT RACK</td>
<td>2 OUTLETS PER SCREENING ROOM</td>
</tr>
<tr>
<td>CURB ALARM AND CHRONOLOGIES - F</td>
<td>2 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>TDC/CAT AND STSO PODIUM - G</td>
<td>2 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>ASL SUPERVISOR CONTROL LOCATION - H</td>
<td>2 x CAT6</td>
<td>TSA IT RACK</td>
<td></td>
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</tbody>
</table>
### ASL Checkpoint Data Cabling Requirements

<table>
<thead>
<tr>
<th>Outlet</th>
<th>Cables Required</th>
<th>Cable Destination</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front X-Ray Outlet - A</td>
<td>4 CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>Rear X-Ray Outlet - B</td>
<td>8 CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>Rear X-Ray Outlet - B Per Lane Served</td>
<td>3 CAT6</td>
<td>AVS/ETD/BLS/AVS/AVS - C</td>
<td></td>
</tr>
<tr>
<td>Single Lane Wall - D</td>
<td>4 CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>Private Screening Room - E</td>
<td>2 CAT6</td>
<td>TSA IT RACK</td>
<td>2 Outlet Per Screening Room</td>
</tr>
<tr>
<td>Screen Display &amp; Sensors Clock - F</td>
<td>2 CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
<tr>
<td>TUG/CAT and Shift podium - G</td>
<td>4 CAT6</td>
<td>TSA IT RACK</td>
<td></td>
</tr>
</tbody>
</table>
• SEMS Server is to be located in a TSA IT Room or a shared Comm. room with the airport in a locked cabinet that shall be provided by ASL vendor. If neither are available TSA HQ IT and TSA HQ Checkpoint design agreed space.

• SEMS Client PC to be located in a TSA Office at the respective checkpoint. Alternate location is at the TSA STSO podium in an approved securable computer cabinet.

• Project Sponsor provided managed switch must be located in a secure location in the checkpoint.

• Fiber optic to be single mode.

• All cable runs to be 100% redundant.

• The fiber infrastructure from the nearest communication room adjacent to each SSCP to the TSA CMF in each terminal will be provided by the airport/airlines at its sole cost and expense. The fiber will be dedicated for TSA use for as long as needed and any maintenance, repair or replacement will be the sole responsibility of the airport/airline. There shall be no cost to TSA for its use of the above referenced fiber infrastructure and its components. This will be a “closed network” at the airport for the TSA ASL only.

• TSA Approved Network switches:

Cisco C3560CX-12PC
• 12 Gigabit Ethernet ports
• 2 x 1 GE copper uplinks
• 2 x 1 GE SFP uplinks
• IP base (IP services with RTU license)
• PoE+ support with up to 240 W of PoE budget

Cisco 3850-12S-S
• 12 x Gigabit Gigabit Ethernet SFP
• Port transmission speed, port duplex mode, system, status, PoE
• IPv4 routes

Cisco WS-C3850-48P
Cisco WS-C3850-24S
GENERAL NOTES - WIRE GAUGE ASSUMPTIONS

- Look at Full Load of the equipment if available.
- Utilize the electrical specs of the units if available. If not use worst case scenario of 30A/2P circuit with (3) #10s.
- If the Distance of the equipment to panel exceeds 100’ up to 150’, estimate (3) #8s. If the distance of the equipment to panel exceeds 150’ up to 250’ estimate (3) #6 conductors.
- Utilize minimum dedicated 1” conduits to leave extra room in the conduits for expansions and risks.
- CT power requirements listed in most cases as 208V/ 30A as worst case possibility. Verify exact requirement with CT OEM.
- CT connection devices are to be twist lock and appropriate to circuit.
SPECIAL NOTE: SURFACE MOUNTING OF ELECTRICAL CONSULT IS TO BE USED ONLY WHERE RELOCATING FLOOR PENETRATIONS IS NOT FEASIBLE YET REQUIRED DUE TO THE LOCATIONS OF THE CONSULT AND SURFACE MOUNTED DEVICES ARE TO BE COMPLETELY UNDER THE EQUIPMENT AND NOT EXPOSED TO FOOT TRAFFIC.