

P25 CG console gateway

Product Safety and Compliance Information



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If you have any enquiries regarding this manual, or any comments, suggestions and notifications of errors, please contact Technical Support.

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To our European Customers



Tait Electronics Limited is an environmentally responsible company which supports waste minimization and material recovery. The European Union's Waste Electrical and Electronic Equipment Directive requires that this product be disposed of separately from the general waste stream when its service life is over. Please be environmentally responsible and dispose through the original supplier, your local municipal waste "separate collection" service, or contact Tait Electronics Limited.

1 About this Booklet

This booklet provides general safety and regulatory information only. Please read the TB9100/P25 CG Installation and Operation Manual before attempting to install or operate the equipment.

2 General Safety

Personal Safety

Lethal Voltages



Warning!! The PMU contains voltages that may be lethal. Refer to the ratings label on the rear of the module.

The P25 Console Gateway must be installed so that the rear of the PMU is located in a service access area. The PMU must be connected to the mains supply source by trained personnel in accordance with local and national regulations.

Disconnect the mains IEC connector and wait for five minutes for the internal voltages to self-discharge before dismantling. The AC power on/off switch does not isolate the PMU from the mains. It breaks only the phase circuit, not the neutral.

The PMU should be serviced only by qualified technicians. There are no user-replaceable parts inside. If the PMU is damaged and does not function properly, stop the module safely and contact your nearest Tait Dealer or Customer Service Organization immediately.

All servicing should be carried out only when the PMU is powered through a mains isolating transformer of sufficient rating. We **strongly recommend** that the mains power to the whole of the repair and test area is supplied via an earth leakage circuit breaker.

Explosive Environments



Warning!! Do not operate P25 Console Gateway equipment near electrical blasting caps or in an explosive atmosphere. Operating the equipment in these environments is a definite safety hazard.

High Temperatures

Take care when handling a PMU which has been operating recently. Under extreme operating conditions (+140°F [+60°C] ambient air temperature) or high duty cycles, the external surfaces of the PMU can reach temperatures of up to +176°F (+80°C).

Equipment Safety

Installation and Servicing Personnel

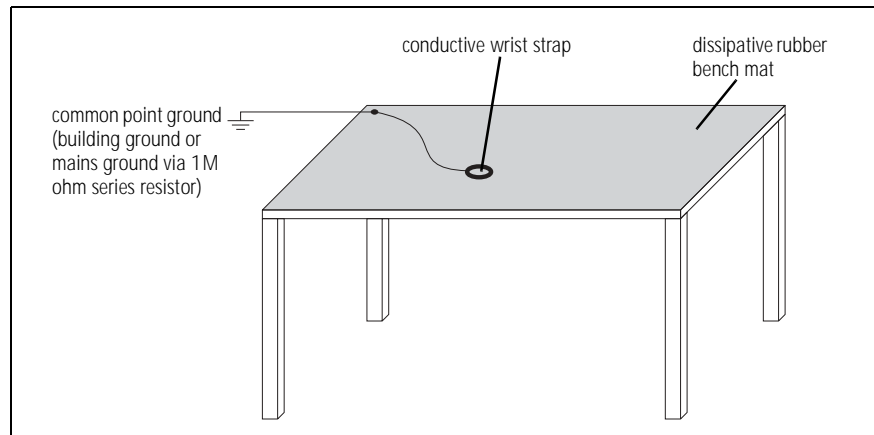
The P25 Console Gateway should be installed and serviced only by qualified personnel.



Important Before opening any console gateway module, make sure that you take proper precautions against electrostatic discharge. This equipment contains devices which are susceptible to damage from static charges. You must handle these devices carefully and according to the procedures described in the manufacturers' data books.

We recommend you purchase an antistatic bench kit from a reputable manufacturer and install and test it according to the manufacturer's instructions. The following diagram shows a typical antistatic bench set-up.

Typical Antistatic Bench Set-up



You can obtain further information on antistatic precautions and the dangers of electrostatic discharge (ESD) from standards such as ANSI/ESD S20.20-1999 or BS EN 100015-4 1994.

Anti-tampering Devices

All network elements should be physically secured, where possible. This includes the use of locked cabinets and the use of seals on connectors.

All network and audio connectors should be sealed with the stick on type of seal. The purpose of the seals is to detect unauthorized tampering. The seal should reveal if any of the connectors have been unplugged or if any unauthorized equipment has been plugged in.

The seals must be difficult to remove without breaking, and must bridge between the cable and equipment side (plug and socket) of the connection.

Seals must cover any unused network or audio sockets. This includes the Ethernet connector on the front panel, any spare switch ports, and the console port on the router and switch.

The seals must be difficult to reproduce. A sticker initialed or signed by the technician should satisfy this.

Seals must be replaced if they need to be disturbed during maintenance.

Environmental Conditions

Operating Temperature Range	The operating temperature range of the P25 Console Gateway is -22°F to $+140^{\circ}\text{F}$ (-30°C to $+60^{\circ}\text{C}$) ambient temperature. Ambient temperature is defined as the temperature of the air at the intake to the cooling fans.
Humidity	The humidity should not exceed 95% relative humidity through the specified operating temperature range.
Dust and Dirt	For uncontrolled environments, the level of airborne particulates must not exceed $100\mu\text{g}/\text{m}^3$.

Grounding and Lightning Protection

Electrical Ground	<p>The P25 Console Gateway modules are grounded by physical contact between the module case and the subrack. To ensure a good ground connection you must tighten each module retaining clamp securely (refer to the section entitled “Final Reassembly” in the TB9100/P25 CG Installation and Operation Manual for the correct torque setting).</p> <p>A threaded grounding connector is provided on the rear of the subrack for connection to the site ground point (refer to the section entitled “Connecting Up the Base Station” in the TB9100/P25 CG Installation and Operation Manual for more details).</p>
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Equipment Ventilation

Always ensure there is adequate ventilation around the P25 Console Gateway.



Warning!! Do not operate it in a sealed cabinet. You must keep the ambient temperature within the specified range, and we strongly recommended that you ensure that the cooling airflow is not restricted.



Important The cooling fans are mounted on the front panel and will only operate when the panel is fitted correctly to the front of the subrack. To ensure adequate airflow through the console gateway, do not operate it for more than a few minutes with the front panel removed (e.g. for servicing purposes).

Unpacking the P25 Console Gateway



Caution A P25 Console Gateway subrack complete with modules can weigh up to 62lb (28kg), or up to 66lb (30kg) complete with packaging. We recommend that, once the equipment is out of the carton, you remove the modules from the subrack before moving the equipment again. In all cases follow safe lifting practices.

Mounting the Subrack



Caution

We recommend that you remove the modules from the subrack before lifting it (refer to the section entitled “Replacing Modules” in the TB9100/P25 CG Installation and Operating Manual), or have another person help you with the lifting.

PMU

The only controls on the PMU are the on/off switches on the rear panel for the AC and DC modules, and the indicator LEDs visible through a slot in the front panel.



Warning!!

These switches do not totally isolate the internal circuitry of the PMU from the AC or DC power supplies. You must disconnect the AC and DC supplies from the PMU before dismantling or carrying out any maintenance. Refer to the service manual for the correct servicing procedures.

AC Module On/Off Switch

This switch turns the AC input to the PMU on and off. Note that this switch breaks only the phase circuit, not the neutral.

DC Module On/Off Switch

This switch turns the DC output from the PMU on and off. It is recessed to prevent the DC module being accidentally switched off, thus disabling the battery back-up supply.

Note that this switch disables only the control circuitry – the DC input is still connected to the power circuitry.

Replacing the PMU



Caution

The PMU weighs between 10.1lb (4.6kg) and 12.8lb (5.8kg). Take care when handling the module to avoid personal injury.

3 Regulatory Information

FCC Compliance

This equipment complies with:

- Part 15 Class B of 47CFR: Radiated and conducted emissions, and electromagnetic susceptibility specifications of the Federal Communications Commission (FCC) rules for the United States.

Operation is subject to the following two conditions:

- a. This device may not cause harmful interference, and
- b. This device must accept any interference received, including interference that may cause undesired operation.

- Part 68 of 47CFR: (Connection of terminal equipment to the telephone network) of the FCC rules and the requirements adopted by ACTA. This equipment's FCC certification number (US: 6FPOTNANTBA1PA0) is displayed on the label to be found towards the rear of the left-hand side of the gateway module. If requested, you must provide this number to the telephone company. (This approval applies solely to the *XBA1PA0 Network Board* in the gateway module.)

Telecommunications Terminal Equipment (TTE) Information:

USOC Jacks: RJICX (where required)

Service Order Code: 7.0Y

Facility Interface Code: 04N02, TL31E

Warnings

If the *XBA1PA0 Network Board* in the gateway module causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If trouble is experienced with the *XBA1PA0 Network Board* in the gateway module, for repair or warranty information, please contact your local Tait Dealer or Customer Service Organization.

Only approved Tait Dealer or Customer Service Organizations equipped with the necessary facilities should perform any servicing. Repairs attempted with incorrect equipment or untrained personnel may result in permanent damage. If the equipment, *XBA1PA0 Network Board* in the gateway module, is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is solved.

Unauthorized Modifications

Any modifications you make to this equipment which are not authorized by Tait Electronics Ltd may invalidate your approval to operate the equipment.

Health, Safety and Electromagnetic Compatibility in Europe

In the European Community, radio and telecommunications equipment is regulated by Directive 1999/5/EC, also known as Radio and Telecommunications Terminal Equipment (R&TTE) directive. The requirements of this directive include protection of health and safety of users, as well as electromagnetic compatibility.

**Intended purpose
of product**

This product can be programmed for emissions that may make its use illegal. A license must be obtained before this product is used. All license requirements must be observed. Limitations may apply.

**Declaration of
Conformity**

You can download the formal Declaration of Conformity from <http://eudocs.taitworld.com/>. You can also obtain a signed and dated paper copy of the Declaration of Conformity from Tait Europe Limited.