

SMC gateway

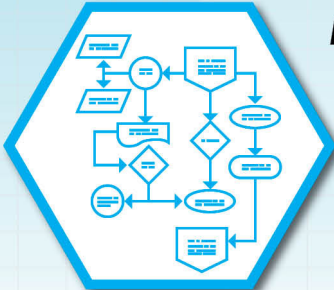
www.smc-gateway.com



Radio Management



Teleconnect



Advanced Application Builder



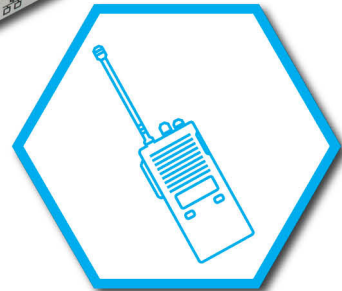
Location Tracking



Lone Worker



Alarm Handler



Radio Systems

User Guide



Preface

SMC - South Midlands Communications Ltd was established in 1958 and initially specialised in antenna support masts, towers and HF antennas. SMC is now recognised globally as a specialist communications company.

Over the last 50 years the SMC product range has grown to include pneumatic telescopic masts, aluminium lattice masts, high-level photography solutions, Mil' specification antenna positioner's and two way radio products including GPS, AVLS and data transfer.

SMC are able to advise, design, supply and install mobile communications systems, from the simple to more complex and integrated networks.

Although every care is taken in the production of this publication it may contain technical inaccuracies or typographical errors. SMC may make improvements and or changes in the product detailed in this manual at any time without notice.

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Safety Information



Always follow the instructions within this manual.



Do not open the SMC Gateway. No user serviceable components.



Modifications must only be carried out by an authorised representative.



Do not connect or disconnect expansion card cables when the unit is powered.

FAILURE TO OBSERVE ANY OF THE WARNINGS IN THIS MANUAL MAY RESULT IN EQUIPMENT DAMAGE. [SOUTH MIDLANDS COMMUNICATIONS LTD. \(SMC\)](#) DO NOT ACCEPT RESPONSIBILITY OR LIABILITY FOR UNAUTHORISED USE OR ACTIONS OUTSIDE OF THOSE RECOMMENDED.

For US use - FCC Notice and Cautions

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Change or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Introduction

The SMC Gateway is a versatile appliance that enables system integrator's to build customer-focused solutions without the need to install PCs and expensive software, it enables you to increase the functionality of your radio system, and other communication devices. The SMC Gateway connects digital radio networks, and other communication devices, to many other systems.

Each gateway is capable of multiple, simultaneous functions, including but not limited to:

- Alarm Handling
- Lone Worker Monitoring
- Location Tracking
- Teleconnect
- Radio Management

Most importantly, the gateway provides you with a powerful flowchart-like tool to create and edit workflows that in turn convert your requirements into the perfect working solution.

Specification

- **Dimensions** L 175mm x W 110mm x H 45mm
- **Temperature** Operating: 0°C to 70°C (32°F to 158°F)
Storage: -10°C to 80°C (14°F to 176°F)
- **Power supply** 9 to 15V DC
3A Internally fused
- **Connectivity** 2x USB A
1x 10/100 Ethernet
- **Options*** RS232, RS422 & RS485
SMC Gateway Dataport (GPIO, Serial and RS232)
GPIO
DTMF
Analogue data logging and monitoring
- **System** Allwinner 1GHz Dual Core Cortex-A7 Processor
1GB DDR3 RAM
- **Network** Default IP Address: 192.168.100.100
Default Subnet Mask: 255.255.255.000
Configuration Portal: 192.168.100.100

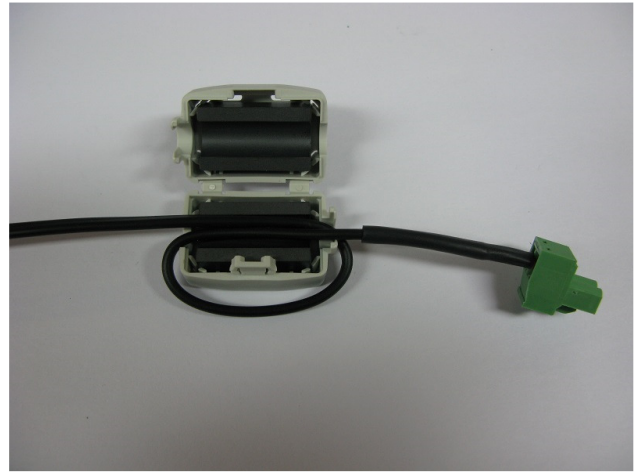
*Dependant on option card. See website for up to date list of available cards.

Powering The Gateway

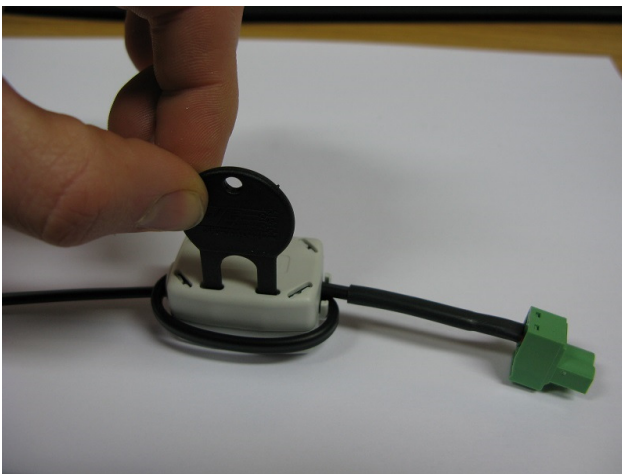
The gateway should be powered by a DC power supply or battery with the appropriate voltage and current ratings. If a non-filtered power supply is used, the included ferrite should be attached to the power supply cable as shown below:



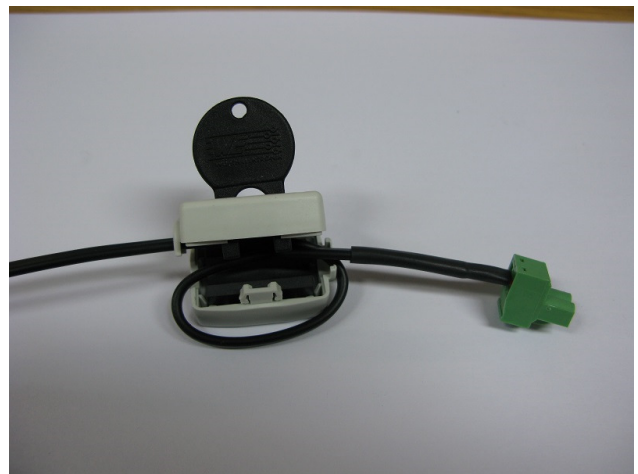
The ferrite* should be installed as close to the DC plug as possible. The cable passes through the ferrite twice.



The cable should be laid in the open ferrite as shown and the two halves click shut under finger pressure.



To open the ferrite, press the included key into the two slots at the back and push down.



When the key is fully inserted the ferrite can be opened.

*Colour of ferrite outer may vary

Operation

The SMC Gateway provides an out of the box solution for most applications, requiring only the following steps to be taken to gain access to the configuration pages.

Refer to separate documents for information on accessory cards if fitted.

1. Ensure the SMC Gateway is positioned in a dry location, away from direct sunlight.
2. Connect the unit to a PC via the Ethernet port.
3. If required, connect other peripherals to the required ports.
4. Connect the unit to a DC power supply using the connector provided in the box,
 - a. Ensure the power supply is capable of supplying a peak current of 3A.
 - b. Ensure the cable is appropriately rated for the current.

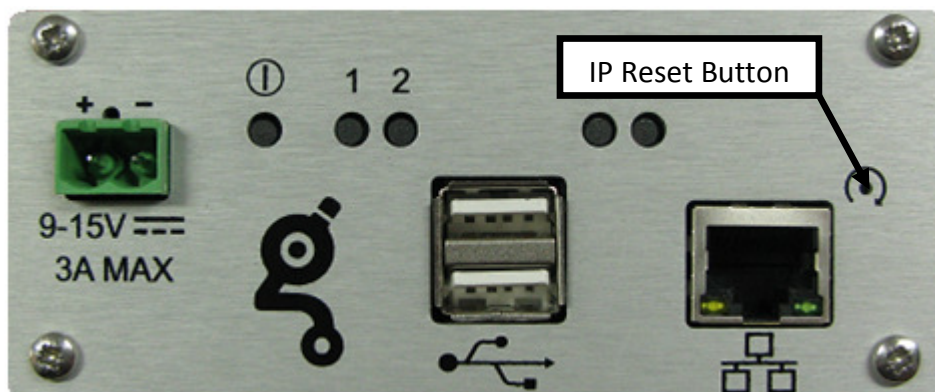


*Only connect to a 9 to 15V DC power supply
ensuring the terminals connect to the correct voltage polarity.*

5. Wait 60 seconds for the unit to fully initialise.
6. The SMC Gateway has a default IP address of 192.168.100.100 and subnet mask of 255.255.255.000, and you will need to change your PC's IP address and subnet mask accordingly.
7. Access the configuration portal using your PC's web browser and entering the address <http://192.168.100.100>
8. For further information visit <http://smc-gateway.com>

Restoring Factory Defaults

If the IP address of the SMC Gateway is changed to an unknown or invalid address, the factory default of 192.168.100.100 can be restored by pressing the recessed button in the front panel (indicated below) with an unfolded paperclip or similar. **Do not insert more than 5mm into the device.**



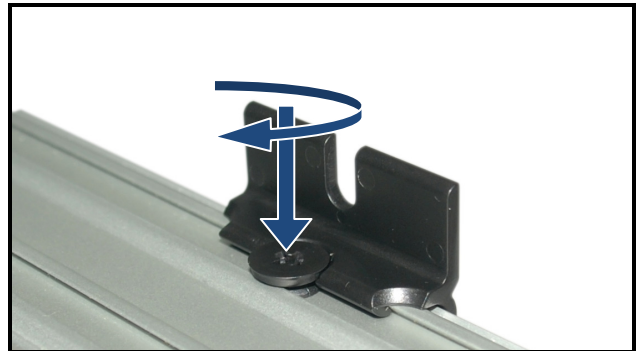
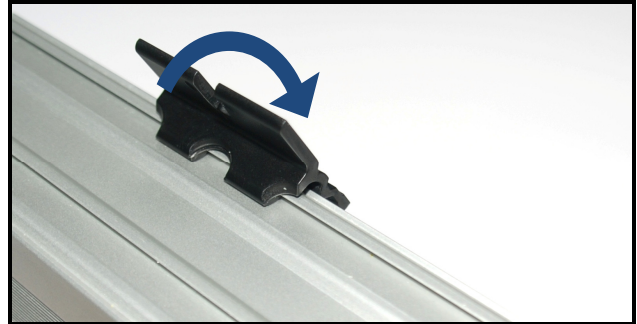
Mounting Options

Desk Top

- For desk top applications use the 4 self adhesive rubber mounting feet supplied.

Secure/Wall mounting

- For secure mounting applications use the 2 wall mounting bracket supplied.
 1. Clip the mounting bracket in the desired position.
 2. Rotate to secure the bracket in position
 3. Insert and rotate the supplied screw a **quarter turn**.
 4. Repeat on the other side of the enclosure
 5. Secure using appropriate fixings for the surface the unit is to be mounted on.



Product Care

- Do not use damaged cables or connectors with the SMC Gateway. If cables are damaged after installation, replace immediately.
- Only clean the exterior of the SMC Gateway with a dry lint free cloth, do not use solvents or spray cleaners.
- Do not expose the SMC Gateway to wet or dusty environments, direct sunlight or temperatures outside those specified.

Troubleshooting Guide

Problem	Possible Cause	Solution
The unit does not power on	Power supply outside of operating voltage.	Ensure the power supply is within the rated voltage range.
	Internal fuse has blown	Return unit for servicing.
Unable to gain access to the device through the network connection.	IP address changed from default.	Contact supplier for advise.
	Induced RF current in network cable is corrupting data packets.	Attach clip on ferrite to network cable close to gateway*.
The green power light is on and nothing responds.	Product lockup due to environmental issues.	Power the unit down for 30 seconds and re-power.
Unit functions intermittently / keeps restarting	Loose Connections	Check all connections and replace if worn or loose.
	Power supply current limit	Ensure power supply is rated to 3A.
	Noisy power supply	Ensure power supply is operating correctly.
	Interference	Remove unit from interference sources (i.e. welding, old motors, high power transmitters... etc)
	Voltage drop on supply cable	Ensure power cable is suitable for the application.

* Minimum recommended ferrite is Würth 742 711 31 or equivalent.

Disposal

UK: This product carries the WEEE Label and if you are intending to discard the product at the end of its useful life, please do not dispose in household or municipal waste. Instead, please be aware that SMC is providing a goods return and treatment facility for SMC branded electrical or electronic products available to you for recycling these products. For full details on returning these products and the SMC Waste Electrical and Electronic Equipment (WEEE) Policy Statement please phone +44 (0)23 8024 6200 or email sales@smc-comms.com

NOTE: If being disposed of outside the UK or EU please refer to local legislation for disposal.

Customer Details

Customer Name

Customer
Address

Installer Name

Installer
Address

Installation
Date

Administrator
User Name

Administrator
Password

IP Address

Notes

