

This guide aims to clarify the applicability of accessories, mounts and cabling required for the RapidM RT family product range.















## Rapid Mobile

RT Product Ordering Guide

## **Contents**

Introduction	1
Export Control	1
Configuration & Key Management Software	1
RT7 Encrypted Voice and Data Modem installation into a 19" rack	2
RT5 Tactical Terminal installation into a vehicle	4
RT5 Tactical Terminal used in a manpack context	6
RT3 Tactical Voice and Data Encryptor for installation into a vehicle	8
RT1 In-Line Voice and Position Encryptor to be used in a manpack context	9



#### Introduction

This guide is designed to assist resellers and systems integrators in making system-level choices regarding the procurement of products in the RT family. Like all other products from RapidM, these products are best identified using RapidM Stock Numbers.

Approved resellers and agents will have our latest valid pricelist and can use the Stock Numbers (for example, RAP-BU-CFTKCVE4) to assist with costing.

Please feel free to contact RapidM to obtain the latest pricelists.

### **Export Control**

Resellers and agents should be aware that all RT devices are subject to Export Control by the South African authorities. Once a sale is in progress, an End-User Certificate (EUC) will be required as part of the export application. Approval may take several months.

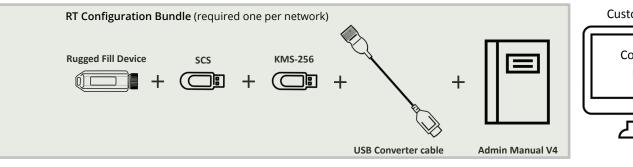
### **Configuration & Key Management Software**

The System Configuration Software (SCS) is required to configure the address parameters (Address Book) of nodes or RT devices that participate in a voice or data communication network using devices in the RT family. Furthermore, the Key Management Software (KMS) will be needed to generate secret unique cryptographic keys from time to time that are filled into RT devices to provide the encryption function.

At least one RT Configuration Bundle including the SCS, KMS and Rugged Fill Device is required to set up a network of RT devices. The SCS and KMS - being software supplied on a USB device - must be installed onto a customer supplied PC (see illustration below). The Fill Device is used to distribute the configuration and keys to RT devices. Additional documentation and cabling required is also included.

Insofar as an End User may want to provide for routine re-keying and emergency re-keying of the RT devices, it will require that there be at least one Rugged Fill Device per platform holding the routine keys and potentially another, separately vaulted, Fill Device for the emergency keys.

At least one RT Configuration bundle is required per network. The Stock Number for this bundle is RAP-BU-CFTKCVE4 and a depiction of this bundle is provided in the diagram below.







# RT7 Encrypted Voice and Data Modem installation into a 19" rack

Strategic and Naval installations are typically installed into 19" racks. The RT7 Encrypted Voice and Data Modem is ideally suited for this when used with MessagePoint, GatePoint or RT CommandPoint (see illustration below).

When the RT7 is purchased (RapidM Stock Number RT7-TU-HSGPCVE4), a number of items are included as standard while optional items need to be ordered separately, as required.

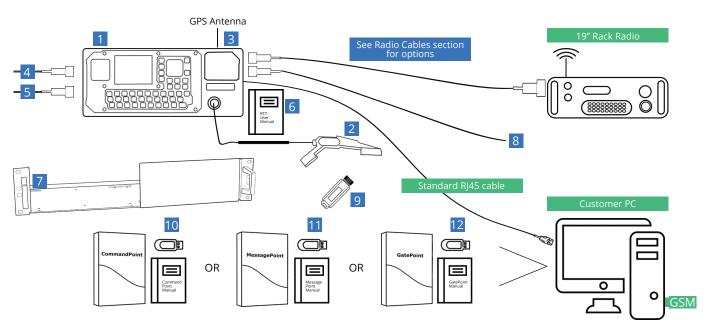
The following items are included as standard:

Item #	RapidM Stock Number	Description
1	N/A	RT7 Encrypted Voice and Data Modem
2	RAP-AC-0855-HND	H-250 Handset P17W
3	RAP-AC-1998-RHW	GPS Antenna and 5m coaxial cable with TNC connector
4	N/A	RT7 DC Power Cable, 2m length, unterminated at the supply end
5	N/A	RT7 AC Power Cable, 2m length, unterminated at the supply end
6	N/A	RT7 User Manual Hard copy

The following optional Items can be ordered separately:

Item #	RapidM Stock Number	Description
7	RAP-AC-1402-RHW	RT7's 19" rack tray
8	RAP-CB-1996-V01	RT7's intercom cable, 2m length, unterminated at the intercom end
9	RAP-AC-0456-RHW	Rugged Fill Device
10	RAP-PC-CTSWCVE4	RT CommandPoint PC software
11	RAP-PC-MPSW-VE4	MessagePoint PC software
12	RAP-PC-GPSW-VE4	GatePoint PC software

RT7 ordering assistance and identification diagram:





The RT7's radio interface cable with remote connector is specific to the transceiver the RT7 will be connected to, see RT7 Radio Cables Table below for options.

#### RT7 Radio Cables:

RapidM Stock Number	Description
RAP-CB-1940-V01	Cable: C14N Rx7 5mS Unterminated
RAP-CB-1938-V01	Cable: C14N Rx7 2mS Barrett 2090
RAP-CB-1990-V01	Cable: C14N Rx7 2mS Datron RT7000
RAP-CB-1931-V01	Cable: C14N Rx7 2mS Grintek TR2000
RAP-CB-1943-V01	Cable: C14N Rx7 2mS Grintek TR2400
RAP-CB-1957-V01	Cable: C14N Rx7 2mS Grintek TR2600
RAP-CB-1953-V01	Cable: C14N Rx7 2mS HMK TRX3000
RAP-CB-1932-V01	Cable: C14N Rx7 2mS Rockwell RT2200
RAP-CB-1952-V01	Cable: C14N Rx7 2mS R&S XK2000
RAP-CB-1933-V01	Cable: C14N Rx7 2mS R&S M3SR XK4100
RAP-CB-1934-V01	Cable: C14N Rx7 2mS R&S M3SR XK4400
RAP-CB-2906-V01	Cable: C14N Rx7 2mS Yaesu Vertex S600

Note that the RT7 Ethernet connector can accommodate a standard RJ45 CAT5 network cable



### RT5 Tactical Terminal installation into a vehicle

The RT5 Tactical Terminal is the most versatile RT device in that it can be used in a variety of installations, ranging from manpack deployments to vehicle installations and even in fixed base installations. Because of this versatility, accessories for the RT5 Tactical Terminal need to be specified and ordered individually using individual RapidM Stock Numbers. This section deals with installation into a vehicle.

RT5 Tactical Terminal vehicular mounting is typically via a Shock Mount Plate which has two versions, either flat mounting or at a 30 degree angle. There are two types of RT5 cradles, either a standard version for regular soft skin vehicle mounting or a GPS Reradiator Cradle used in armoured vehicles or vehicle installations where a GPS signal is not available at the RT5 in the cradle. The chosen cradle can then be fitted onto the mounting plate. The GPS Reradiator requires the fitment of an external active GPS antenna via a SMA-type RF connector. These types of antennae are specific to the vehicle fitment and are not supplied by RapidM.

As a mounting alternative, all RT5 cradle options provide a RAM™ type RAM-202 mounting footprint to which a range of mounting accessories may be fitted. See <a href="http://www.rammount.com/">http://www.rammount.com/</a> for more details on the RAM product range. For more details on RT5 mounting footprints and dimensions, please contact RapidM for the *Rx5 Cradle Mount Installation Guide* document RM-RAD-AC-0163UM.

When the RT5 is purchased (RapidM Stock Number RT5-TU-SBDVCVE4), a number of items are included as standard while optional items need to be ordered separately, as required.

The following items are included as standard:

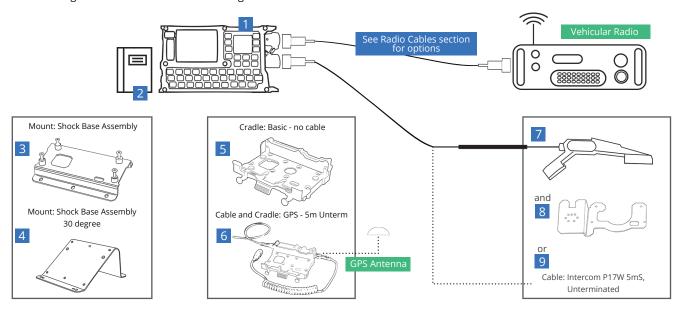
Item #	RapidM Stock Number	Description
1	N/A	RT5 Tactical Terminal
2	N/A	RT5 User Manual Hard copy

The following additional items can be ordered for an RT5 Vehicle Installation:

Item #	RapidM Stock Number	Description
3	RAP-AC-1099-RHW	Mount: Shock Base Assembly
4	RAP-AC-1270-RHW	Mount: Shock Base Assembly 30 degree
5	RAP-AC-1220-RHW	Cradle: Basic - no cable
6	RAP-AC-1167-RHW	Cable & Cradle: GPS - 5m Unterm
7	RAP-AC-0855-HND	Accessory: P17W H-250/U Handset
8	RAP-AC-1240-RHW	Mount: Handset plate for Cradle
9	RAP-CB-2955-V01	Cable: Intercom P17W 5mS, Unterminated



RT5 ordering assistance and identification diagram for vehicular installation:



For vehicle fitment, RT5-to-Radio cables are typically 5 meter straight lengths with various options depending on radio type. RT3 devices use these same radio cables.

#### RT5 and RT3 Vehicular Radio Cables Table:

RapidM Stock Number	Description
RAP-CB-1219-V01	Cable: P17N Rxx 5mS Unterminated
RAP-CB-0965-V01	Cable: P17N Rx5 5mS Barrett 2082, 2084
RAP-CB-0970-V01	Cable: P17N Rx5 5mS Barrett 2090
RAP-CB-1903-V01	Cable: P17N Rx5 5mS Codan 2110
RAP-CB-1956-V01	Cable: P17N Rx5 5mS Datron PRC1099
RAP-CB-1921-V02	Cable: P17N Rx5 5mS Datron RT7000
RAP-CB-0972-V01	Cable: P17N Rx5 5mS Grintek TR2000/6000
RAP-CB-0975-V01	Cable: P17N Rx5 5mS Grintek TR2400
RAP-CB-0980-V01	Cable: P17N Rx5 5mS Harris Falcon II
RAP-CB-1923-V01	Cable: P17N Rx5 5mS Harris PRC-138
RAP-CB-1902-V01	Cable: P17N Rx5 5mS Tadiran PRC-6020
RAP-CB-0978-V01	Cable: P17N Rx5 5mS Thales TRC3600/3700
RAP-CB-0974-V01	Cable: P17N Rx5 5mS USSC 55116 U229

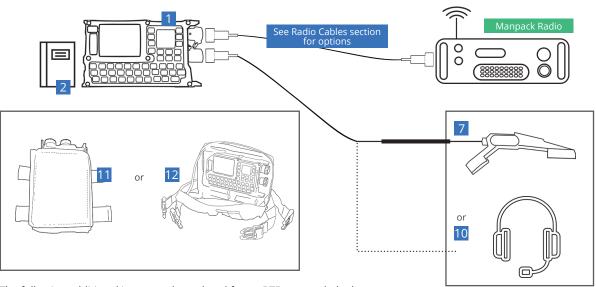


## RT5 Tactical Terminal used in a manpack context

When used together with a manpack radio, the RT5 Tactical Terminal can be either fitted into the Navigation Pouch or Belt & Shoulder Pouch for manpack mounting. The Navigation Pouch is intended to fit a MOLLE vest or can be tied to the shoulder straps of a radio backpack. The Belt & Shoulder Pouch can be tied onto the radio backpack or onto a waist belt.

For voice, either the standard H-250 handset or Tactical Headset can be ordered.

RT5 ordering assistance and identification diagram for manpack deployments:



The following additional items can be ordered for an RT5 manpack deployment:

Item #	RapidM Stock Number	Description
7	RAP-AC-0855-HND	Accessory: P17W H-250/U Handset
10	RAP-AC-1973-RHW	Accessory: P17W Tact Headset + PTT Box
11	RAP-AC-0494-RHW	Accessory: Pouch Navigation Black
12	RAP-AC-0492-GHW	Accessory: Pouch Belt & Shoulder Green

Manpack fitment RT5-to-Radio cables are typically 1 meter length curly-cords with various options depending on radio type. RT5 manpack deployment Radio Cables Table:

RapidM Stock Number	Description
RAP-CB-0834-V02	Cable: P17N Rxx 1mC Unterminated
RAP-CB-0837-V01	Cable: P17N Rx5 1mC Barrett 2090
RAP-CB-0845-V03	Cable: P17N Rx5 1mC BEL Stars-V
RAP-CB-0856-V01	Cable: P17N Rx5 1mC Codan 2110
RAP-CB-0948-V01	Cable: P17N Rx5 1mC Datron PRC1099
RAP-CB-0833-V02	Cable: P17N Rx5 1mC Datron Spectre-V
RAP-CB-0877-V01	Cable: P17N Rx5 1mC Gen. Dyn. URC-200
RAP-CB-0835-V03	Cable: P17N Rx5 1mC Grintek TR2000/6000
RAP-CB-0452-V04	Cable: P17N Rx5 1mC Grintek TR2400
RAP-CB-0938-V01	Cable: P17N Rx5 1mC Harris Falcon II



RapidM Stock Number	Description	
RAP-CB-1922-V01	Cable: P17N Rx5 1mC Harris PRC-138	
RAP-CB-0473-V02	Cable: P17N Rx5 1mC SANDF (8-pin)	
RAP-CB-0923-V01	Cable: P17N Rx5 1mC Tadiran PRC-6020	
RAP-CB-0878-V01	Cable: P17N Rx5 1mC Thales TRC3600/3700	
RAP-CB-0462-V02	Cable: P17N Rx5 1mC USSC 55116 U229	



## RT3 Tactical Voice and Data Encryptor for installation into a vehicle

The RT3 Tactical Voice and Data Encryptor has been designed for vehicular mounting. This is typically done via a Shock Mount Plate. For more detail on RT3 mounting footprints and dimensions, please contact RapidM for the *Rx3 Mount Drawing* document RM-2653.

The RT3 has a built-in GPS module that requires the fitment of an external Active GPS Antenna. The RT3 GPS antenna interface is a TNC-type RF connector.

For voice connection, either the standard H-250 handset or an Intercom interface cable can be ordered.

When the RT3 is purchased (using RapidM Stock Number RT3-TU-0000CVE4), a number of items are included as standard while optional items need to be ordered separately, as required.

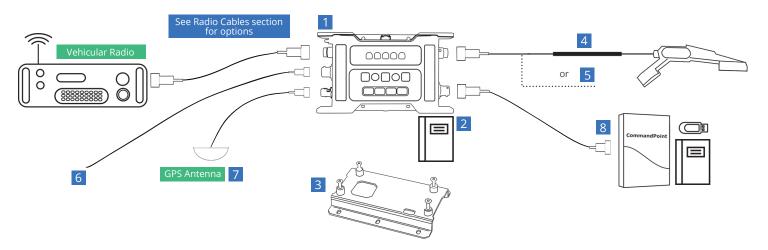
The following items are included as standard:

Item #	RapidM Stock Number	Description
1	N/A	RT3 Tactical Voice and Data Encryptor
2	N/A	RT3 User Manual Hard copy

The following additional items can be ordered for an RT3 Vehicle Installation:

Item #	RapidM Stock Number	Description
3	RAP-AC-2653-RHW	Mount: Rx3 Shock Base Assembly
4	RAP-AC-0855-HND	Accessory: P17W H-250/U Handset
5	RAP-CB-2955-V01	Cable: Intercom P17N 5mS, Unterminated
6	RAP-CB-1968-PWR	Cable: 2m Amp 62IN4S Power, Unterminated
7	RAP-AC-1998-RHW	Accessory: GPS Ant + 5m TNCm to TNCm
8	RAP-PC-CTKACVE4	PC S/W: RT CmdPoint, Cable 62IN4P EN V4

RT3 ordering assistance and identification diagram for vehicular installation:



For vehicle fitment, RT3-to-Radio cables are typically 5 meter straight lengths with various options depending on radio type. RT3 devices use these same radio cables as RT5 devices. For a list of radio cables, see the RT5 and RT3 Vehicular Radio Cables Table above.



## RT1 In-Line Voice and Position Encryptor used in a manpack context

The RT1 In-Line Voice and Position Encryptor includes a mounting strap that can be used to attach the device to a backpack shoulder strap or to MOLLE type webbing. The RT1 also includes a RT1 User Manual (hard copy).

Various product options exist for the radio interface as well as the audio interface. The RapidM Stock Number depends on the product option required.

The RT1 ordering stock number can be composed as follows:

