

CC1 (S25)

Al-Enabled Tactical End User Device



Changing Worlds

Background

People, not equipment, are the critical component in all operations. We understand the significant physical and cognitive burden faced by our war-fighters and know how the application of technology can help reduce both of these factors.

Commercial technology is becoming common place in modern theatres of operation. It provides the opportunity to leverage investments made by large technology companies that can be adapted and subsequently adopted by war-fighters.

Nothing encapsulates this more than recent advances in AI enabling capabilities within smartphones that are now mission ready and can be deployed to augment existing situational awareness capabilities, enhancing survivability and lethality at the tactical edge.

Operations can be conducted with either limited or no user input, exploiting the platform's processing capacity to leverage advances in Artificial Intelligence and Machine Learning. Tactical smartphones enable the hosting of Battle Management Applications (BMA) which provide user interfaces that allow operators to comprehend the common operating picture. They are re-configurable to support the next mission with the benefit of being hardware agnostic enabling evergreen development. CC1 (S25) is the first AI Enabled Tactical End User Device (EUD) that still offers secure, networked, intuitive and supported capability in the field, but now is further enhanced to deliver battle winning autonomy, dynamic planning and responsiveness at the tactical edge.

CC1 provides a lightweight solution that meets the demand for soldier worn sensors and systems. In this way, devices can present key operational information to the deployed operator where it can be displayed, aggregated and shared within the team and beyond.

Based on the flagship Samsung Galaxy S25 smartphone, CC1 has been engineered through the partnership of Roke and Samsung, to meet the demanding requirements of the tactical environment. It's scalable, secure, and underpinned by open standards and architectures to drive modernisation in military operations through the adoption and augmentation of powerful AI technologies.



Specifications

Device	Samsung Galaxy S25	Colour - Black			
Chipset	Qualcomm SM8750-AB Snapdragon 8 Elite (3 nm)				
Processor	CPU Type - Octa-Core	GPU Type - Adreno 830			
Display	Size 6.2 inches, 94.4 cm² (~91.1% screen-to-body ratio)	Resolution 1080 x 2340 pixels 19.5:9 ratio (~416 ppi density)			
Connectivity	USB Interface - USB Type-C USB Version - USB 3.2				
Operating System/Security	Android 15 Samsung Knox API v3.9 or h				
Physical Specification	Dimension (HxWxD)Weight146.9 x 70.5 x 7.2 mm162 g (5.71 oz)(5.78 x 2.78 x 0.28 in)162 g (5.71 oz)				
Battery	Battery Capacity (mAh, Typical) - 4000				
Hardware	OEM SKU: SM-S901BZKGEUB	IP68 dust/water resistant (up to 1.5m for 30 minutes)			
Enabling Features	Tactical App Store - Mission critical content deployment to the tactical edge; Tactical Ecosystem portal				
	Augmented Battlespace – Autonomy, enhancing survivability and lethality at the tactical edge				
	Tactical network configuration and management				
	Selective inhibition of all RF sources to support EMCOM				
	Open API for tactical features to enable 3rd party development				
	Configurable device button and screen controls, including enhanced sensitivity for gloved use				
Security Enhancements	Ability to fully disable all RF capability (BT, WiFi Celluar) including E911 suppression				
	Event triggered data and device security when under threat				
	Network interface (WiFi, BT) whitellisting and firewalls				
Mobile Device Management (MDM)	The CC1 Management Laptop provides the user with the ability to configure and apply security and user policies and the 'Tactical App' Hosting Environment to meet changing tactical environments and re-provision to recover following security events.				

Specification features are subject to change.

Specifications

Accessories	Ruggedised smartphone cases with mounts for Samsung Galaxy S25 - Contact Roke for details. Cables and tactical USB hubs to integrate tactical radio equipment and other ancillaries – Information available on request.		
Software Platform	Galaxy AI ML and generative features Open Tactical API v1.x providing programmatic access to: • Static & DHCP configuration for all network interfaces • Per network interface advanced firewall • EMCON RF transmit inhibitor • EMCON light reduction		
Compatibility	Compatible with the full Google Android eco-system of apps Supports integration of third party MDM solutions in the event that additional controls are required over and above the CC1 security and user policy tool Support for military and commercial data radios via USB CDC ECM, ASIX and RNDIS Host mode drivers		

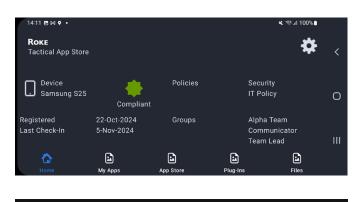
Specification features are subject to change.

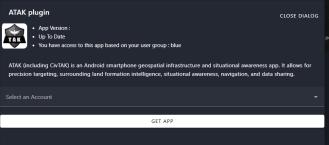
< ROKE Pantheon 🤡	+ 20 Montessori Center International Brown Hertsardens Weighhouse Street
	9 8 7 5 4 3 2 29 Brown Hart Gardens 27 6 26
🛇 МАР	Green Street 66 11-12 The Beaumont 1-2 yr 24 Hampden 9 George 0 rd Providence Court George 0 rd Providence Court 9 86 80- Lees 6 80-
AI CHAT	20 Court 20 Lees place 23 Re 20 77
INVENTORY	Mayfair 2 1 43 Cottage 1-3 22 Grosvenor 5 Grosvenor 5
竣 SETTINGS	12 7.6 4.3/2 Per Brook street TAK: Bravo Elsenhover Grosvenor Status Square
문, OPTIONS 🗸 🗸	Per Blo 53 48 50 ■ 0 Statut Square Leaflet © OpenStreetMap

Tactical Enablers

Tactical App Store

The system enables mission-critical content deployment to the tactical edge by delivering new mission software efficiently and securely. It presents assured baselines and supporting information to deployed users, ensuring they have reliable and up-to-date resources. Additionally, the system selectively deploys software and supporting information onto end-user devices, providing targeted and effective support for mission objectives.





Tactical Platform

- · App Storefront
- · App & Data Library
- · App Hosting Environment
- · App Launcher
- Tactical Mobile Device Management

Software & Application Services

- · Test & Reference Service
- \cdot Test Tools
- · Configuration Management

Roke Tactical App Store	App Library						
	Q Search						
App Store	App ID	App Name	App Version	Tags	Actions		
My Apps		ATAK plugin	1.7.6	["offline"]	•		
My Team		Spot API		["navigation", "secure"]	•		
Admin							
				Items per page: 10 🔹	1-2 of 2		

Tactical Enablers

Augmented Battlespace

Consolidation of AI enabled applications and services targeted at augmenting existing situational awareness capabilities, enhancing survivability and lethality at the tactical edge.

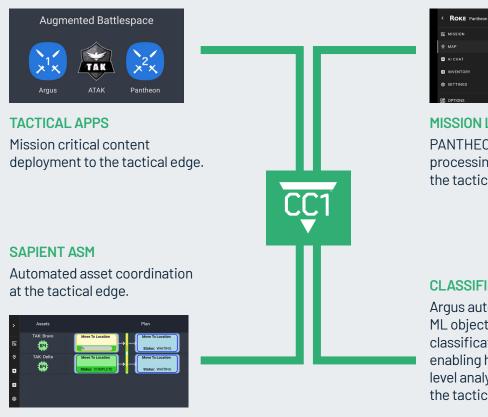
Pantheon – Natural Language mission planning and asset coordination; Hands free reporting; BMA integration.

Argus – Al Classification of objects of interest for higher level analysis (i.e. face recognition); Cross-cueing of low power, expendable sensors.

Built on the class-leading Samsung Galaxy S25 featuring Galaxy Al technology.

Large Language Model (LLM), Mission planning, SAPIENT ASM and Object classification for high level analysis.

Combining Roke's tactical smartphone and AI & autonomy expertise to delivering battle winning autonomy, dynamic planning & responsiveness at the tactical edge, increasing survivability and lethality.





MISSION LLM PANTHEON LLM to natural language processing and mission planning at the tactical edge.

CLASSIFIER

Argus automated ML object classification enabling higher level analysis at the tactical edge.



Core Applications



Usability

Meeting the Human Factors Integration needs of the specialist End User community through application console and making User Security features readily accessible.



Security

Working with Samsung Knox security, we delivered advanced and intuitive 'Event Based' & 'Manual' End User Device security.

Deployability

Intuitive Knox Licence, User Policy, Security Policy, App & Data deployment.



Networking

Working with Samsung to enable to advanced networking features and presenting an intuitive interface to End Users.



How we can help you

Your information and information systems are key weapons in the modern battlespace. Properly designed, they allow you to get inside and dislocate your adversary's decision-making process, while simultaneously strengthening your own. Open, evergreen solutions seamlessly integrate information sources, connecting the tactical edge with the enterprise to enable the development of campaigns that manoeuvre minds, as well as military resources. We offer comprehensive integrated logistic support services for our products, from creating technical documentation to delivering bespoke training sessions, enabling the equipment we provide to achieve a high level of availability and remain operational to full design limits.

Please contact **info@roke.co.uk** to find out how the new CC1, the first Al-Enabled Tactical End User Device can help you control the battlespace.





We believe in improving the world through innovation. We do it by bringing the physical and digital together in ways that revolutionise industries.

That's why we've fostered an environment where some of the world's finest minds have the freedom, support and trust to succeed.

Roke is a team of curious and deeply technical engineers dedicated to safely unlocking the economic and societal potential of connected real-world assets. Our 60 year heritage and deep knowledge in sensors, communications, cyber and AI means our people are uniquely placed to combine and apply these technologies in ways that keep people safe whilst unlocking value. For our clients, we're a trusted partner that welcomes any problem confident that our consulting, research, innovation and product development will help them revolutionise and improve their world.

If you're bringing the physical and digital worlds together, we'd love to talk.

Roke Manor Research Ltd Romsey, Hampshire, S051 0ZN, UK T: +44 (0)1794 833000 info@roke.co.uk www.roke.co.uk

© Roke Manor Research Limited 2025 • All rights reserved.

This publication is issued to provide outline information only, which (unless agreed by the company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or be regarded as representation relating to the products or services concerned. The company reserves the right to alter without notice the specification, design or conditions of supply of any product or service.