COMMUNICASE® TECHNOLOGY

The next generation in portable satellite communications flexibility.
Fast, flexible and affordable: the smart SATCOM solution.

Speed, flexibility and cost: the three key elements of a smart, reliable satellite communications strategy, whether it’s for a top-of-the-hour broadcast or in the midst of an enemy battlefield.

At Rockwell Collins, we’ve tackled those three elements to produce CommuniCase® Technology (CCT), the next generation of the world’s quickest-to-air satellite terminals.

Easy to switch whenever, wherever.

At the heart of CommuniCase Technology is choice: Interchangeable modules allow you to customize for mission, portability, speed and budget. Seven modules give you the widest range of configurability, whatever the challenge:

- CCT Antenna System
- CCT Transceiver
- CCT Controller
- CCT Network Processor
- CCT Software
- CCT Power Supply
- CCT Auxiliaries

Change transceivers in the field for mission flexibility. Transfer the network processor from a Suitcase to a Drive-away solution to maximize your investment. Whatever the configuration, you can count on CommuniCase Technology for speed, flexibility and the reliable communications solutions Rockwell Collins has produced for more than 75 years.

All CCT products are constructed of rugged materials to withstand any conditions and are tightly sealed to keep out sand, dust and water. They are rigorously tested to surpass the toughest environments and standards.
The details make the difference.

From our unique component design to our intuitive user interface, we knew that getting the details of CommuniCase® Technology (CCT) just right would add up to some very big advantages.

Future proof

› A modular system allows you to change key characteristics of your SWE-DISH CCT system, maximizing your investment and enabling true flexibility to easily adapt to future needs.

Flexible

› The market-unique CCT Smart Distributed System (SDS) will automatically adjust to different system configurations for hassle-free operations and fast-to-air satellite connectivity.

Less training

› The common, intuitive GUI on all CCT products allows users to become quickly fluent on all CCT terminals.

Physically integrated terminal

› Our systems are fully integrated into one unit, dramatically improving handling, transportation and reducing the risk of lost or damaged interconnect cables.

Designed for in-the-field performance

› The compact design of our antennas and systems ensures they are well protected from wind drag, rain, dust and other environmental hazards. Their low weight makes them easy to carry.

From case to contact in minutes

› With no tools needed, easy one-person operation, an intuitive GUI, and fully automatic point-and-shoot antenna controls, your CCT systems will be ready for transmission in minutes.

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<thead>
<tr>
<th>Size/Band</th>
<th>X</th>
<th>Ku</th>
<th>Ka</th>
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<td>Suitcase CCT120</td>
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<td>Drive-Away CCT120</td>
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Build your CCT system: multiple choices in seven modules for ultimate flexibility.

CCT120 Suitcase®

Module #1 – Antenna System

Module #6 – Power Supply

Module #3 – Controller

Module #5 – Network Processor

Module #2 – Transceiver

Modules #4 and #7 – Software and Auxiliaries not pictured

CCT Antenna System

Module #1

The CCT Antenna System consists of the main reflector, feed arm, a subreflector for dual optics Gregorian-type antennas, and elevation and azimuth drive lines. The CCT Antenna System allows you to simply switch antenna size and change key characteristics easily and cost effectively.

Each of the antennas utilizes a Gregorian offset antenna system, allowing us to shape the beam better, radically improve performance, and make the feed arm sturdier.

The CCT Antenna System module comes in four versions, with more to follow.
CCT Transceiver

The CCT Transceiver converts transmit and receive intermediate L-band frequencies into satellite microwave signals and amplifies the signal levels. The CCT Transceiver module of the unique CommuniCase® Technology (CCT) architecture is easily switched in three minutes. The complete CCT Transceiver unit, incorporating all band-specific components including the feed horn, is lifted out of the feed arm and replaced with another frequency band or power level to achieve a new system configuration. The proprietary reference system ensures perfect alignment every time.

Ka-band 35W  Ku-band 50W  X-band 60W  Ku-band 180W

CCT Controller

The CCT Controller monitors and controls the complete CCT terminal. Utilizing our innovative Smart Distributed System (SDS), the Controller identifies the unique ID codes of each module and configures and monitors the terminal for maximum efficiency, monitoring and controlling the antenna system, modulator, demodulator, block up and down converters and high powered amplifier (HPA).

An in-built L-band spectrum analyzer together with other options is available.

CCT Controller XD  CCT Controller RD
All CommuniCase® Technology (CCT) products are configured via a common, intuitive, Java™-based GUI interface (compatible with PC/Mac/Linux®) – maximizing training time and speed of operation.

The CCT Software allows for point-and-shoot automation, with motorized antenna pointing and optimization driven by user-entered satellite data or the software’s library of predefined satellites, satellite channels, and transmission channels.

Three levels of password-protected access allow for various user types and skills, from operator-only access to full access for configuration of files and technical monitoring.

The client server and database – based on the Linux operating system – reside in the CCT Controller so new operators always find the latest settings, regardless of who used it last. For ease of use across multiple terminals, set up files can be configured offline and uploaded to multiple terminals.

The CCT Network Processor allows you to change networks on the fly in the field: Simply insert a different modem cassette and the terminal automatically updates the system and the GUI. Multiple network configurations are available, and for the ultimate flexibility, we can even integrate your own specific L-band modem.

A number of hardware and software options are available. Consult CCT Network Processor data sheet or Sales for further information.

- **L-Band** – supports an external modem with Tx and Rx IFL interfaces within the frequency range 950 MHz and 2 GHz.
- **SCPC** – FDMA modem enables point-to-point communications, including serial data, IP data, IP Gateway and DHCP server.
- **Evolution** – TDM/TDMA modem built on DVB-S2 standard and increases improvements in bandwidth efficiency. Supports point-to-point, star and mesh topologies.
- **SatNet** – DVB-S2/DVB-RCS software-defined modem allows MF-TDMA and DVB-S2 transmission. Supports point-to-point and star topologies.
- **LinkWayS2/S** – TDM/TDMA modem built on DVB-S2 standard and increases improvements in bandwidth efficiency. Supports star and mesh topologies. Crypto version only.
- **SkyWAN** – TDMA modem with advanced Turbo coding and load balancing between channels. Support star and mesh topologies and an optional crypto version.
CCT Power Supply Module #6

Powering your versatile CCT Terminal is a power supply module strong enough, rugged enough, and smart enough to power the world’s quickest-to-air satellite terminals. Available in two configurations—portable for field-ready power or designed for integration into a vehicle or flight case—CCT power supply modules share the same unique architecture of the rest of the CCT system: Change key characteristics easily and cost effectively with reliable results.

CCT Power Supply 4R

CCT Power Supply 8X24

CCT Auxiliaries Module #7/Options

- CCT Ethernet Extender
- Surface Mounting Kit
- Distance Remote Control/SNMP

CCT Packaging

CommuniCase® Technology (CCT) is smart on the outside, too. Depending on how you would like to transport your terminal, we offer different solutions – courier case, IATA case, backpack and a softcase option.

Transport case solutions for separate CCT modules are also available.
Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

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