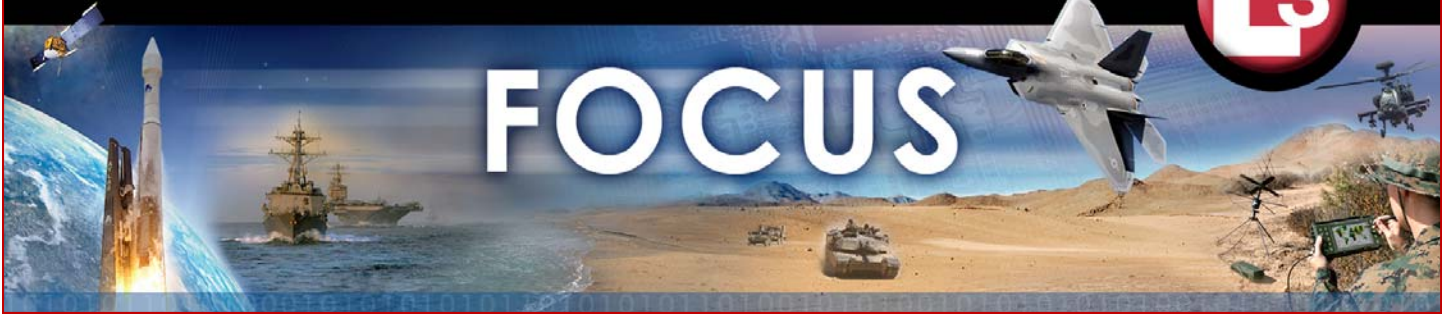


customer newsletter from L3 Telemetry & RF Products



FOCUS



Technologies

WE ARE NOW L3 TECHNOLOGIES, INC.

SAN DIEGO — On January 1, 2017, L-3 Communications Corporation was renamed L3 Technologies, Inc.

For the past 20 years, L3 has established a reputation for delivering outstanding value, innovation and performance to our customers. This name change builds on L3's brand, while highlighting the organization's ability to provide a broad range of technology solutions to the markets we serve.

Our corporate website is now L3T.com.

As a main division within the organization, L3 Telemetry & RF Products (L3 T&RF) will continue to serve all of our customers and their growing needs.

For more information, please visit our website at L3T.com/TRF.

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UPCOMING EVENTS

Satellite 2017

Washington, D.C. | March 6 –9

Unmanned Aircraft Systems West

San Diego, CA | March 7 – 8

33rd Space Symposium

Colorado Springs, CO | April 3 –6

CubeSat Developers Workshop

San Luis Obispo, CA | April 26 –28

This publication consists of L3 Technologies, Inc. general capabilities information that does not contain controlled technical data as defined within the International Traffic in Arms (ITAR) Part 120.10 or Export Administration Regulations (EAR) Part 734.7-11. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.

NEW PRODUCT DEVELOPMENTS

For more information on any of the following products, please visit L3T.com/TRF.

L3 TELEMETRY & RF PRODUCTS INTRODUCES MULTI-FUNCTION MINIATURE TRANSCEIVER FOR SHORT MISSION APPLICATIONS

SAN DIEGO – L3 T&RF is pleased to announce our latest space product component – the **CXS-1000** software-defined radio.



Leveraging L3's unparalleled experience in mission-critical TT&C products, this multi-band and multi-waveform transceiver is designed for shorter duration microsat and CubeSat applications where our size/weight/power and cost are critical elements.

The new **CXS-1000** can be provided in receiver- or transmitter- only configurations, including an isolated power supply. Currently under contract, engineering models will be available during the second quarter of 2017. Initial flight model deliveries are scheduled for the first quarter of 2018.

Features:

- › RX data rates to 1 Mbps, TX data rates to 20 Mbps
- › Waveforms supported include BPSK, QPSK, SOQPSK, UQPSK, SGLS, USB and user-defined
- › Scalable output power from 1 W to 10 W
- › Options for higher-frequency transmission available in same form factor
- › Serial control and status, per IRIG 106-11



CXS-1000 Software-Defined Radio

Our **CXS-1000** continues L3 T&RF's commitment to the domestic and international spacecraft marketplace.

Critical Information Anytime, Anywhere.

SECURE SATELLITE COMMANDS AND SPACE-QUALIFIED RADIOS

SAN DIEGO – L3 T&RF recently received government approval for a DSP-5 license to market our Medium Rate AES (MRA-700) encryptor/decryptor.

The unit is currently in development, with planned space qualification by the end of 2017.

The **MRA-700** is an integrated AES-256 passed encryptor/decryptor spacecraft unit that provides secure uplink, downlink protection for satellite commands, telemetry, crosslinks or payload downlinks. With an LVDS interface, the unit supports up to 640 Mbps encrypt and 40 Mbps decrypt data rates.

The unit is also planned to be CNSSP-12 compliant.



MRA-700

SAN DIEGO – L3 T&RF currently has Ku-Band on-orbit heritage with a commercial GEO satellite that launched in June 2016.

The **CTKu-900** telemetry transmitter and the **CRKu-900** command receiver are both space-qualified TT&C radios and can be used for commercial GEO satellites.

The design of these radios supports on-orbit tuning to alternate operating frequencies for both the transmitter and the receiver. The units also offer commandable or factory set data rates.

Three more satellites and the Ka-Band version of the command receiver are planned to launch in 2017.



CTKu-900



CRKu-900

P R O D U C T U P D A T E S

For more information on any of the following products, please visit L3T.com/TRF.

COMMERCIAL PRODUCTS FOR THE GLOBAL MARKET

SAN DIEGO — L3 T&RF supports a wide range of products for the commercial space industry.

Products:

- › **CDU-200 AES-256 Command Decryptor:**
TAA-approved for new commercial satellite programs



- › **MRA-700 AES-256 Encryptor/Decryptor:**
DSP-5 marketing license approved for NATO countries



- › **InControl:**
Customizable command and control software for AI&T and on-orbit operations

InControl[®]

- › **CXS-1000 Software-Defined Radio:**
Software-defined miniature transceiver for small satellite and short-term missions



- › **CTKu/CRKu-900 and CTKa/CRKa-900:**
Ku- and Ka- Band receivers and transmitters for Commercial Satellite TC&R

S A T E L L I T E 2 0 1 7 P R E V I E W :

E X P L O R E T H E C O N N E C T E D W O R L D

L3 T&RF will be exhibiting at Satellite 2017, taking place March 6 – 9 at the Walter E. Washington Convention Center in Washington, D.C. The exhibit hall will be open March 7 – 9.

Satellite 2017 welcomes aerospace professionals, thought leaders, entrepreneurs, executives, engineers, end-users and enthusiasts alike for the most important global satellite technology event of the year.

Visit the **L3 Booth #1201** to see our various technologies for advancing next-generation satellites!

Use the **VIP code** to the right to register for your show badge and receive a discount as an L3 customer.

For more information on the show/conference, please visit 2017.satshow.com.

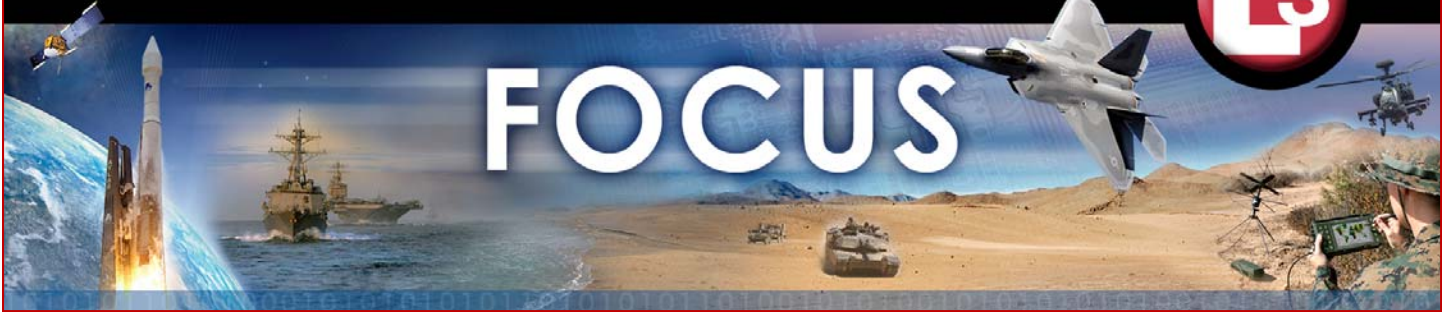
 A graphic for the Satellite 2017 event featuring a stylized satellite icon and the text 'SATellite 2017' with 'EXPLORE THE CONNECTED WORLD' below it.

SATellite 2017[®]
EXPLORE THE CONNECTED WORLD
March 7-9, 2017
Walter E. Washington Convention Center
Washington, DC
L3 booth #1201 | VIP Code: L3MZI

customer newsletter from L3 Telemetry & RF Products



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Telemetry & RF Products

L3 Telemetry & RF Products is a full-service manufacturer of state-of-the-art communication and telemetry solutions for airborne, intel, maritime, space and terrestrial applications.

Our integrated solutions, which combine latest-generation technologies and proven processes, are sold to defense, intelligence and government agencies, as well as international and commercial organizations.

We partner with customers, industry and academia to develop innovations that reduce costs and improve performance.

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PLEASE EMAIL YOUR COMMENTS, SUGGESTIONS OR REQUESTS TO: L3T&RF.Marketing@L3T.com

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