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**FOR IMMEDIATE RELEASE**

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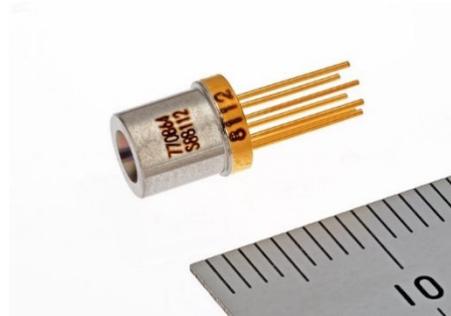
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## **Mitsubishi Electric to Ship Samples of 100Gbps EML CAN for 5G Mobile Base Stations**

*Supports both high-speed data transmissions and reduced power consumption*

**TOKYO, September 3, 2020** – [Mitsubishi Electric Corporation](http://www.mitsubishielectric.com) (TOKYO: 6503) announced today that it will begin shipping samples of its 100Gbps EML (electro-absorption modulator laser) CAN for high-speed, large-capacity optical data transmissions in fifth-generation (5G) mobile base stations on radio access networks on October 1. The new model also supports enhanced manufacturing productivity.



100Gbps EML CAN (ML770B64)

### **Sales Schedule**

Product	Model	Wavelength	Operating case temperature range	Shipment date
100Gbps EML CAN	ML770B64	1310nm	- 40°C to + 95°C	October 1, 2020

Mobile communication systems worldwide are being required to handle increasing data communication volume due to the transition from 4G to 5G, the spread of mobile terminals including smartphones and tablets, and the shift of information to the cloud. The expansion of 5G mobile networks will require the transmission of huge volumes of data to/and from base stations in high-speed optical communication networks, which in turn will drive the demand for high-speed, low-power-consumption optical devices. The new 100Gbps EML CAN not only meets these requirements, it also contributes to greater efficiency in manufacturing optical transceivers. The new 100Gbps EML CAN utilizing the industry-standard TO-56 CAN package will be provided for 5G base stations.

## **Product Features**

### **1) Supports high-speed, large-volume 5G mobile networks**

- As a TO-56 CAN package equipped with an EML device, achieves an industry-leading\* transmission speed of 100 Gbps thanks to the widening frequency bandwidths of EML devices and packages (package size:  $\phi 5.6\text{mm}$ ) and the adoption of 4-level pulse-amplitude modulation (PAM4).

\* As of September 3, 2020 according to Mitsubishi Electric research

### **2) Reduces power consumption of optical transceivers by about 60 percent**

- Operating case temperature range between  $-40^{\circ}\text{C}$  and  $95^{\circ}\text{C}$  due to downsized thermo-modules (which convert heat and power to keep EML device temperatures constant).
- Power consumption of thermo-modules reduced by approximately 60 percent compared to current FU-402REA model for 100Gbps transmissions.

### **3) Improves productivity in manufacturing optical transceivers**

- Simplifies fabrication of bi-directional optical modules used in optical transceivers.
- Compatible with standard TO-56 CAN package.

## **EML CAN Product Lineup for 5G Mobile Base Stations (new model in bold)**

Transmission speed	Model
100 Gbps	<b>ML770B64</b>
25 Gbps	ML760B54

## **Main Specifications**

Model	ML770B64
Wavelengths	1304.5 to 1317.5nm
Optical output power	more than +10dBm (typical value)
Extinction ratio	more than 5dB (typical value)
Operating case temperature range	$-40^{\circ}\text{C}$ to $+95^{\circ}\text{C}$
Power consumption of thermo-modules	0.4W (typical value at $+95^{\circ}\text{C}$ )
Package size	$\phi 5.6\text{mm}$

## **Environmental Awareness**

This product is compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive 2011/65/EU and (EU) 2015/863.

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## **About Mitsubishi Electric Corporation**

With nearly 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Mitsubishi Electric enriches society with technology in the spirit of its corporate statement, "Changes for the Better," and environmental statement, "Eco Changes." The company recorded a revenue of 4,462.5 billion yen (U.S.\$ 40.9 billion\*) in the fiscal year ended March 31, 2020. For more information, please visit [www.MitsubishiElectric.com](http://www.MitsubishiElectric.com)

\*U.S. dollar amounts are translated from yen at the rate of  $\text{¥}109=\text{U.S.}\$1$ , the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2020