



# MITSUBISHI ELECTRIC CORPORATION PUBLIC RELATIONS DIVISION

7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

#### FOR IMMEDIATE RELEASE

Customer Inquiries

Sensing Systems Department A Integrated Sensing Systems Div. Mitsubishi Electric Corporation

www.MitsubishiElectric.com/bu/lidar

#### No. 3204

Media Inquiries

Public Relations Division
Mitsubishi Electric Corporation
prd.gnews@nk.MitsubishiElectric.co.jp
www.MitsubishiElectric.com/news

# Mitsubishi Electric to supply Terminal Doppler Lidar to Météo-France for enhanced aircraft and flight traffic safety during clear weather at Nice Côte d'Azur Airport

Company's first Terminal Doppler Lidar delivery in Europe will support strategy to expand global sales to 2.5 billion yen by March 2021

**TOKYO, July 12, 2018** – <u>Mitsubishi Electric Corporation</u> (TOKYO: 6503) announced today that it has been awarded a contract by Météo-France, the national meteorological service in France, to supply a Terminal Doppler Lidar system (DIABREZZA™ A Series) for use at Nice Côte d'Azur Airport, France's second-busiest international airport, which handled 13.3 million passengers in 2017. Mitsubishi Electric will supply its first Terminal Doppler Lidar in Europe with this order. The company aims to expand its weather radar and lidar business, including Terminal Doppler Lidar, in global markets to net sales of about 2.5 billion yen by March 2021.



Size	2.6 x 1.9 x 2.2m (W x D x H)
Weight	2t or less

DIABREZZA™ A Series Terminal Doppler Lidar

Neither the Terminal Doppler Weather Radar system for detecting wind shear around airports nor radar using microwaves to measure precipitation are effective in clear-weather conditions. To maximize prevention of aircraft accidents due to wind shear, detection is required under all conditions, not just during precipitation, which is why the integration of radar and lidar is especially crucial for large-scale airports.

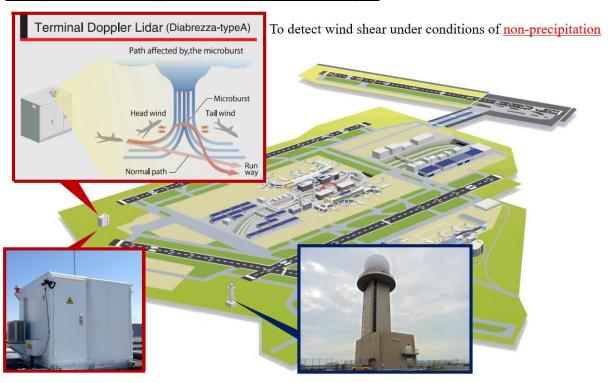
A Terminal Doppler Lidar transmits laser beams and then detects light backscattered by dust and other particles in the air, which enables the system to measure line-of-sight wind speed using the Doppler frequency shift of the backscattered light. Mitsubishi Electric has developed a planar waveguide amplifier that extends the line-of-sight wind speed observation range to more than 20km and complies with Standards and Recommended Practices of the International Civil Aviation Organization (ICAO), an organization ensuring that civil aviation operations and regulations conform to international norms.

Mitsubishi Electric has been delivering Terminal Doppler Lidar systems to airports since 2015. Five systems supplied by the company are currently operating at Tokyo (Japan), Narita (Japan) and Hong Kong (China) international airports. Another two are scheduled to be delivered to Beijing Daxing (China) and Antalya (Turkey) international airports in 2018, prior to the delivery to Nice Côte d'Azur Airport. Going forward, Mitsubishi Electric expects to deliver additional systems to international airports in Europe and other markets with the aim of expanding global net sales to 2.5 billion yen.

**Supply Record of Terminal Doppler Lidar Systems** 

Recipient	Delivered	Quantity
Tokyo International Airport (Japan)	2015	1
Narita International Airport (Japan)	2016	1
Hong Kong International Airport (China)	2016	2
Tokyo International Airport (Japan)	2017	1
Beijing Daxing International Airport (China)	2018 (scheduled)	1
Antalya Airport (Turkey)	2018 (scheduled)	1

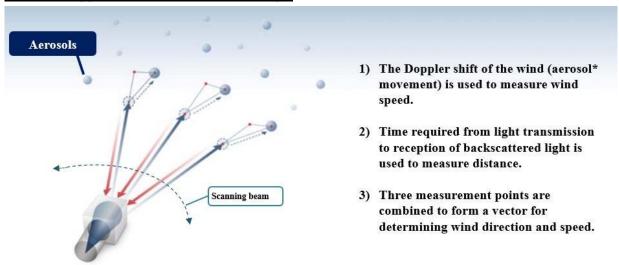
# **Example of Terminal Doppler Lidar Deployment at an Airport**



# Terminal Doppler Weather Radar:

To detect wind shear under conditions of precipitation

### **Terminal Doppler Lidar Measurement Principle**



<sup>\*</sup>Aerosols are also defined as particulate matter occurring as solid particles or liquid droplets smaller than 0.1 microns in diameter

DIABREZZA is a registered trademark of Mitsubishi Electric Corporation.

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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. Embracing the spirit of its corporate statement, Changes for the Better, and its environmental statement, Eco Changes, Mitsubishi Electric endeavors to be a global, leading green company, enriching society with technology. The company recorded consolidated group sales of 4,431.1 billion yen (US\$ 41.8 billion\*) in the fiscal year ended March 31, 2018. For more information visit:

#### www.MitsubishiElectric.com

<sup>\*</sup>At an exchange rate of 106 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2018