

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
RADIO STATION CONSTRUCTION PERMIT
AND LICENSE**

EXPERIMENTAL

(Nature of Service)

XD FX

(Class of Station)

WJ2XYO

(Call Sign)

0137-EX-CR-2021

(File Number)

NAME Kymeta Corporation

Subject to the provisions of the Communications Act of 1934, subsequent acts, and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the licensee hereof is hereby authorized to use and operate the radio transmitting facilities hereinafter described for radio communications in accordance with the program of experimentation described by the licensee in its application for license.

Operation: In accordance with Sec. 5.3(e j) of the Commission's Rules

Station Locations

(1) US, US

Frequency Information

US, US

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
14-14.5 GHz	FX	100KG7W 50M0G7W	30.55 kW (ERP)	0.001 %

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) Licensee should be aware that other stations may be licensed on these frequencies and if any interference occurs, the licensee of this authorization will be subject to immediate shut down.
- (3) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (4) All customers participating in the experiment shall be informed that this operation is for experimental purposes only and can be cancelled at any time.
- (5) The stop buzzer contact for this project is Kymeta Network Operations Center (NOC) at (855) 525-6638.

This authorization effective May 01, 2021 and
will expire 3:00 A.M. EST May 01, 2023

**FEDERAL
COMMUNICATIONS
COMMISSION**



Special Conditions:

- (6) The stations are authorized to conduct tests in a fixed mode using the 14.0-14.5 GHz frequency band. The operations are subject to the following conditions:
- a. POINT OF COMMUNICATION: Authorized Geostationary-satellite orbit (GSO) Ku-band satellites.
 - b. The authorized stations must be in compliance with the off-axis EIRP power spectral density ("PSD") standards (the "off-axis mask") set forth in 25.218(f) for fixed earth stations.
 - c. Operations must be in compliance with the requirements set forth in Section 25.212(c)(2) of the Commission's Rules: the input power spectral density into the antenna must not exceed -14 dBW/4 kHz.
 - d. Operations must be in compliance with the following technical parameters:

Frequency	Station Class	Emission Designator	Authorized Power
14.0-14.5 GHz	FX	100KG7W	30.55 kW (ERP)
14.0-14.5 GHz	FX	50M0G7W	30.55 kW (ERP)
 - e. The stations are authorized, on a non-protected and non-harmful interference basis, to transmit to the geostationary-orbit space stations using the 14.0-14.5 GHz frequency band that are authorized by the Commissions. The stations authorized herein must immediately terminate operations upon notification that such operation is causing harmful interference to any other radio system lawfully operating in the 14.0-14.5 GHz frequency band. The stations authorized herein cannot claim protection from harmful interference from any radio system lawfully operating in the 14.0-14.5 frequency band.
 - f. Operation pursuant to this authorization must be in compliance with the terms of coordination agreements between the authorized GSO Ku-band satellite operators operating in the 14.0-14.5 GHz frequency band and operators of other Ku-band geostationary space stations within six angular degrees of those space stations. In the event that another GSO FSS space station commences operation in the Ku-band at a location within six degrees of any of these space stations, earth stations operating pursuant to this temporary authority shall cease transmitting to that space station unless and until such operation has been coordinated with the new space station's operator or Licensee demonstrates that such operation will not cause harmful interference to the new co-frequency space station.
 - g. Communications between authorized station(s) and the Ku-band geostationary space stations must be in compliance with all existing and future space station coordination agreements reached between the Ku-band GSO operators and other administrations; and between the Ku-band GSO operators and, if any, the Ku-band NGSO (non-geostationary space stations) operators.
 - h. Operations must be in compliance with the requirements set forth in Section 25.203 (e)-(h) of the Commission's Rules (See Section 25.203 Choice of sites and frequencies).

Special Conditions:

- (7) Licensee is authorized to operate 25 unites of flat panel (70cm diameter) antenna in the United States (all 50 States) using the 14.0-14.5 GHz frequency band. Operations in the 13.75-14.0 GHz frequency band are not permitted.
- (8) The authorized stations must be in compliance with environmental requirement set forth in Section 1.1307 of the Commission's Rules.
- (9) COORDINATION OF OPERATION IS REQUIRED WITH THE NASA GSFC SM, SCOTT GALBRAITH AT 301-286-5089 OR VINCENT.S.GALBRAITH(AT)NASA.GOV, AT LEAST 7 DAYS IN ADVANCE OF OPERATION WHEN OPERATING WITHIN 125 KM OF WHITE SANDS SUP05 CENTER, NM OR BLOSSOM POINT COMPLEX, MD.