

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

EXPERIMENTAL
(Nature of Service)

XR FX
(Class of Station)

WM2XFC
(Call Sign)

0914-EX-CN-2021
(File Number)

NAME 281 Communications 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(h) of the Commission's Rules

Station Locations

- (1) Fairland, TX - NL 30-38-15; WL 98-15-33
- (2) Marble Falls (BURNET), TX - NL 30-35-06; WL 98-16-12
- (3) Burnet (BURNET), TX - NL 30-34-57; WL 98-16-25
- (4) Kingsland (BURNET), TX - NL 30-40-41; WL 98-23-05
- (5) Kingsland (BURNET), TX - NL 30-39-40; WL 98-26-44
- (6) Kingsland (BURNET), TX - NL 30-39-55; WL 98-28-25
- (7) Burnet (BURNET), TX - NL 30-44-06; WL 98-09-54
- (8) Kingsland (BURNET), TX - NL 30-40-41; WL 98-23-05
- (9) Kingsland (BURNET), TX - NL 30-39-55; WL 98-28-25
- (10) Marble Falls (BURNET), TX - NL 30-35-06; WL 98-16-12

Frequency Information

Fairland, TX - NL 30-38-15; WL 98-15-33

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX		206.46 mW (ERP)	

This authorization effective January 20, 2022 and
will expire 3:00 A.M. EST February 01, 2024

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Frequency Information

Marble Falls (BURNET), TX - NL 30-35-06; WL 98-16-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Burnet (BURNET), TX - NL 30-34-57; WL 98-16-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Kingsland (BURNET), TX - NL 30-40-41; WL 98-23-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Kingsland (BURNET), TX - NL 30-39-40; WL 98-26-44

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Frequency Information

Kingsland (BURNET), TX - NL 30-39-55; WL 98-28-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Burnet (BURNET), TX - NL 30-44-06; WL 98-09-54

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Kingsland (BURNET), TX - NL 30-40-41; WL 98-23-05

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Kingsland (BURNET), TX - NL 30-39-55; WL 98-28-25

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Frequency Information

Marble Falls (BURNET), TX - NL 30-35-06; WL 98-16-12

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
5925-6400 MHz	FX	80M0M0D	206.46 mW (ERP)	

Special Conditions:

- (1) Marketing of devices (as defined in 47CFR2.803 of this chapter) or provision of services for hire is not permitted.
- (2) Prior to equipment authorization or a determination of compliance, the device must be accompanied by a conspicuous notice worded as follows: "This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained."
- (3) Licensee is required to ensure that trial devices are either rendered inoperable or retrieved by them from trial participants at the conclusion of the trial. Licensee is required to notify trial participants in advance that operation of the trial device is subject to this condition.
- (4) 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.
- (5) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (6) The station identification requirements of Section 5.115 of the Commission's Rules are waived.
- (7) All customers participating in the experiment shall be informed that this operation is for experimental purposes only and can be cancelled at any time.
- (8) All transmitting and/or receiving equipment used in the study shall be owned by the licensee.
- (9) The applicant must coordinate with the Fixed Microwave Service licensees in the proposed areas in accordance with 47 C.F.R, Part 101.103(d) prior to commencing experimental operations.
- (10) Operation is not permitted using the frequency band 5850-5925 MHz.
- (11) Licensee is authorized to conduct tests on 4 units of Mimosa A5 antennas (AP) mounted on fixed towers work as a Standard Power Access Point under AFC control in the UNII-5 (5925-6400 MHz) frequency band with antenna gain of 14 dBi. The Maximum output power of Mimosa A5 antenna must not exceed 0.16W/22dBm/-8dBW. The Maximum EIRP of Mimosa A5 antenna must not exceed 36 dBm = 4 watt = 6 dBW = 2.43W ERP. In addition, the maximum power spectral density shall not exceed 23 dBm (200mW) in any 1-megahertz band:

Antenna Gain	output power	authorized power	Maximum EIRP
14dBi	0.16W/22dBm/-8dBW	2.43 W ERP	2.43W ERP/4 watts/36 dBm/6dBW

Special Conditions:

- (12) Licensee is authorized to conduct tests on 7 units of Mimosa A5c antennas (AP) mounted on fixed towers work as a Standard Power Access Point under AFC control in the UNII-5 (5925-6400 MHz) frequency band with antenna gain of 17 dBi. The Maximum output power of Mimosa A5c antenna must not exceed 0.08W/19dBm/-11dBW. The Maximum EIRP of Mimosa A5c antenna must not exceed 36 dBm = 4 watt = 6 dBW = 2.43W ERP. In addition, the maximum power spectral density shall not exceed 23 dBm (200mW) in any 1-megahertz band:
- | Antenna Gain | output power | authorized power | Maximum EIRP |
|--------------|--------------------|------------------|-------------------------------|
| 17dBi | 0.08W/19dBm/-11dBW | 2.43 W ERP | 2.43W ERP/4 watts/36 dBm/6dBW |
- (13) Licensee is authorized to conduct tests on 64 units of Mimosa C5x and 40 units of Mimosa C5c Ultra dish radios (CPE) work as a Client devices (Client Connected to outdoor standard power access point) in the UNII-5 (5925-6400 MHz) frequency band with antenna gain of 27.5 dBi. The maximum power spectral density must not exceed 17 dBm (0.05 W) EIRP in any 1-megahertz band. In addition, the maximum EIRP over the frequency band of operation must not exceed 30 dBm (30 dBm EIRP = 0.61 W ERP = 1 watt = 0dBW):
- | Antenna Gain | output power | authorized power | Maximum EIRP |
|--------------|-------------------------|------------------|------------------------------|
| 27.5dBi | 0.0018W/2.5dBm/-27.5dBW | 0.61 W ERP | 0.61 W ERP/1watt/30 dBm/0dBW |
- (14) Licensee is authorized to conduct tests on 58 units of Mimosa C5 Ultra dish radios (CPE) work as a Client devices (Client Connected to outdoor standard power access point) in the UNII-5 (5925-6400 MHz) frequency band with antenna gain of 20 dBi. The maximum power spectral density must not exceed 17 dBm (0.05 W) EIRP in any 1-megahertz band. In addition, the maximum EIRP over the frequency band of operation must not exceed 30 dBm (30 dBm EIRP = 0.61W ERP = 1 watt = 0dBW):
- | Antenna Gain | output power | authorized power | Maximum EIRP |
|--------------|--------------------|------------------|------------------------------|
| 20dBi | 0.01W/10dBm/-20dBW | 0.61 W ERP | 0.61 W ERP/1watt/30 dBm/0dBW |
- (15) For conducting outdoor tests in the 5.925-6.425 GHz (U-NII-5) frequency band, the maximum EIRP from a Standard-Power Access Point (AFC Controlled) and fixed client device must not exceed 125 mW (21 dBm) at any elevation angle of more than 30 degrees above the horizon to protect satellite receivers.
- (16) For transmitters operating within the 5.925-6.425 GHz (U-NII-5) frequency band: Any emissions outside of the 5.925-6.425 GHz band must not exceed an EIRP of -27 dBm /MHz (The -27 dBm is equivalent to 0.000002 W).
- (17) This is for experimental purpose only and doesn't permit commercial service.