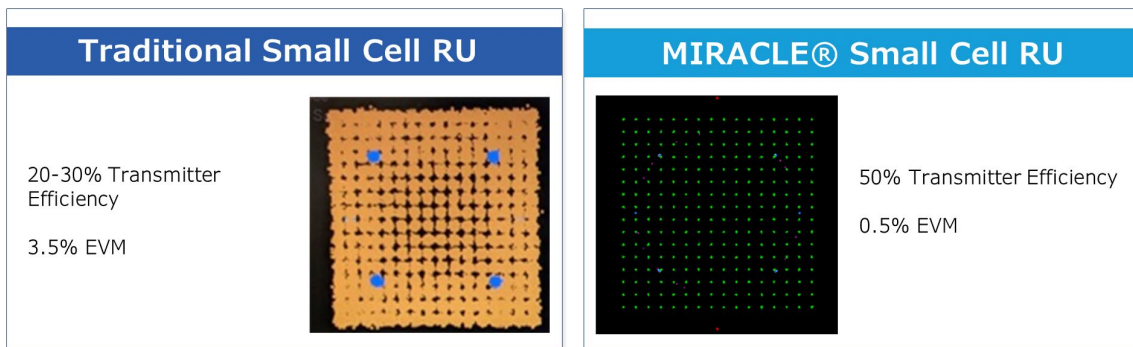


Overview

The MIRACLE® ERx035 5G Small Cell Radio Unit (RU) is the industry's most power efficient, lightest weight, small form factor n48 CBRS ORAN 7.2x RU.

Eridan has reinvented wireless radios with an all-digital switching architecture in Gallium Nitride. Our Direct Polar circuit architecture separately amplifies amplitude and phase thus allowing for highly power-efficient recombination in a final mixer stage. Using Gallium Nitride (GaN) for the RF front-end enables power efficiency and precision across a wide frequency range. Power efficiency and EVM performance are simultaneously maintained.

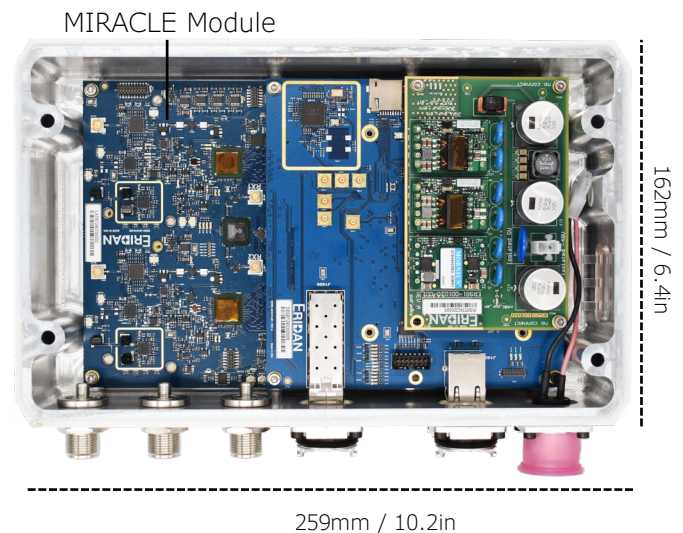
ERx035's superior EVM translates into more than twice the coverage area compared with traditional RUs with the same transmit power per antenna.



ERx035 RUs can also support digital phase adjustment for beam-steering without the need for phase-shifters or splitters.

Features

- 3GPP n48 band
- ORAN Split 7.2x Radio Unit
- Interoperability with industry standard DU's and end-to-end 5G RAN
- MIMO 2Tx 2Rx / 4Tx 4Rx
- 256 QAM DL, 64 QAM UL
- IP65 rated Outdoor Unit, pole / wall mount
- GNSS, IEEE 1588 vs PTP timing synchronization
- 3 LEDs reporting Status and Power
- FCC 47 Part 15
- ROHS6
- UL
- Passive convection cooling
- External antennas



Specifications - Electrical / Mechanical / Environmental

Parameter	Min	Typ	Max	Units
Band	3550*		3700*	MHz
Instantaneous Bandwidth (IBW) per TX		40**		MHz
Transmit Power (per TX)		0.5 27		W dBm
Power Efficiency		50		%
Error Vector Magnitude (EVM)		1***		%
Adjacent Channel Leakage (ACLR)	45			dBc
Power Consumption		30		W
Input Voltage	-40		-57	VDC
Dimensions (H)		82 3.2		mm in
Dimensions (L)		259 10.2		mm in
Dimensions (W)		162 6.4		mm in
Weight		2.1 4.5		kg lbs
Operating Temperature (ambient)	-20		55	C

* SKUs for other bands under development; ** 5G-NR; *** 5G-NR at TX output

Interfaces

Interface	Description	Input/Output	Connector
ANT0	TX / RX Port 0 to antenna	I/O	N-Type
ANT1	TX / RX Port 1 to antenna	I/O	N-Type
Fronthaul	eCPRI 10Gbps fiber port to DU	I/O	SFP+ 10G
ETH0	100M/1G Ethernet for Config and Management	I/O	RJ-45
GNSS	GNSS port 50 ohms	I	SMA Male
Power	-48VDC Power	PWR	Standard

Ordering Information

Part Number	Description	MIMO	Band	Availability
ER2035-1	MIRACLE® 5G RU	2TX 2RX	n48 (3.55 – 3.7GHz)	Q3 2024