

NEWSPACE MARKET · COMPANY PROFILE



Rakon Limited

New Zealand · founded 1967 · rakon.com

16

PRODUCTS

10

WITH DATASHEETS

newspacemarket.com/companies/rakon/

as of 20 August 2026

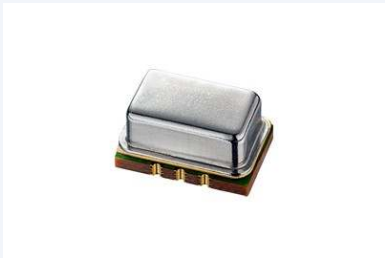


Rakon Limited

Rakon was founded on 4 April 1967 by Warren Robinson in Auckland, New Zealand, growing out of his marine-radio business Marlin Electronics, which needed region-specific quartz crystals for its radios. By 1971 the company had moved to dedicated premises, employed over 30 staff, and was exporting to Australia and Southeast Asia. Over more than five decades Rakon grew into a vertically integrated designer and manufacturer of frequency control products, with wholly owned subsidiaries in the UK and France and manufacturing operations in India, Taiwan, China, Singapore and South Korea. The company is listed on the NZX under ticker RAK. In the space sector, Rakon has over 40 years of flight heritage supplying frequency control components and subsystems to government and commercial programmes, including Chandrayaan, Mangalyaan, Galileo, Mars Express, Mars 2020, Sentinel and the International Space Station. Rakon's France manufacturing sites (Pont-Sainte-Marie and Mougins) hold ESA CoQ 333C and ESA CoQ 334C certifications alongside ISO 9001:2015 and EN 9100:2018; in March 2026 the company opened a new ISO 8 cleanroom in Pont-Sainte-Marie dedicated to space timing and navigation subsystem production. Rakon's space portfolio spans Traditional Space (GEO missions up to 20 years), NewSpace (LEO/smallsat constellations, 5-12 year missions), and ground-station equipment.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

Product catalogue



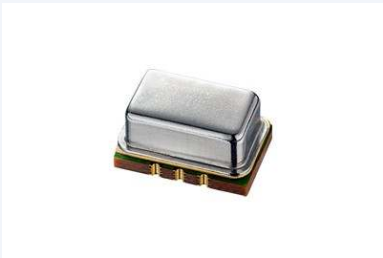
RAKON LIMITED

CRYSTAL OSCILLATORS, CLASS 2 Variant 01

A rad-hard crystal oscillator, Class 2, with AHCMOS/ACMOS compatible output, operating from 4MHz to 100MHz, supplied in a 14-lead Flat Package (FP1).

Nominal Output Frequency	4 to 100 MHz
Case	FP1
Nominal Supply Voltage	3.3 V
Output Waveform	AHCMOS, ACMOS
Weight max	5 g
Total Dose Radiation Level	R [100krad(Si)]
Supply Voltage (functional range)	+3.13V to +3.47V

price on request



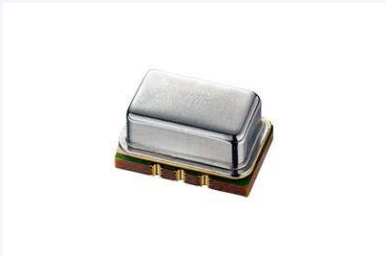
RAKON LIMITED

CRYSTAL OSCILLATORS, CLASS 2 Variant 02

A rad-hard crystal oscillator, Class 2, with AHCMOS/ACMOS compatible output, operating from 4MHz to 100MHz, supplied in a 20-lead Flat Package (FP2).

Nominal Output Frequency	4 to 100 MHz
Case	FP2
Nominal Supply Voltage	3.3 V
Output Waveform	AHCMOS, ACMOS
Weight max	5 g
Total Dose Radiation Level	R [100krad(Si)]
Supply Voltage (functional range)	+3.13V to +3.47V

price on request



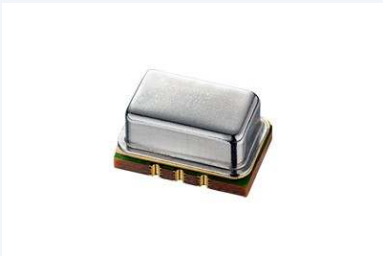
RAKON LIMITED

CRYSTAL OSCILLATORS, CLASS 2 Variant 03

A rad-hard crystal oscillator, Class 2, with AHCMOS/ACMOS compatible output, operating from 4MHz to 100MHz, supplied in a 12-lead Flat Package (FP3).

Nominal Output Frequency	4 to 100 MHz
Case	FP3
Nominal Supply Voltage	3.3 V
Output Waveform	AHCMOS, ACMOS
Weight max	5 g
Total Dose Radiation Level	R [100krad(Si)]
Supply Voltage (functional range)	+3.13V to +3.47V

price on request



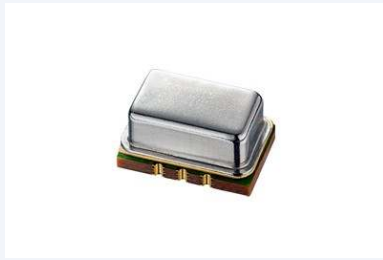
RAKON LIMITED

CRYSTAL OSCILLATORS, CLASS 2 Variant 04

A rad-hard crystal oscillator, Class 2, with AHCMOS/ACMOS compatible output, operating from 4MHz to 100MHz, supplied in a 16-lead Flat Package (FP4).

Nominal Output Frequency	4 to 100 MHz
Case	FP4
Nominal Supply Voltage	3.3 V
Output Waveform	AHCMOS, ACMOS
Weight max	5 g
Total Dose Radiation Level	R [100krad(Si)]
Supply Voltage (functional range)	+3.13V to +3.47V

price on request



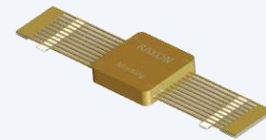
RAKON LIMITED

CRYSTAL OSCILLATORS, CLASS 2 Variant 06

A rad-hard crystal oscillator, Class 2, with AHCMOS/ACMOS compatible output, operating from 4MHz to 100MHz, supplied in a 4-lead J-Lead Package (JL2).

Nominal Output Frequency	4 to 100 MHz
Case	JL2
Nominal Supply Voltage	3.3 V
Output Waveform	AHCMOS, ACMOS
Weight max	2 g
Total Dose Radiation Level	R [100krad(Si)]
Supply Voltage (functional range)	+3.13V to +3.47V

[price on request](#)



RAKON LIMITED

ESCC3503001 Space Clock Oscillator (XO)

ESCC Qualified Parts List (QPL) space clock oscillator (4–100 MHz) for mission-critical satellite timing with –55 to +110°C operating range.

Frequency Range	4–100 MHz
Frequency Stability	≤±30–40 ppm
Operating Temperature	–55 to +110°C
Dimensions	16 × 16 × 3.8 mm
Package	SMD
Type	XO (Crystal Clock Oscillator)
Qualification	ESCC Qualified Parts List (QPL), first frequency control product globally (2021)

[price on request](#)

[datasheet](#)



RAKON LIMITED

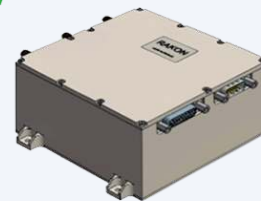
NewSpace Compact Master Reference Oscillator

A compact Master Reference Oscillator (MRO) designed for NewSpace constellations, generating and distributing highly stable and reliable frequency signals for telecommunications, n

Output frequency	100MHz/200 MHz
Overall frequency stability (2 years)	±50 ppb
Overall frequency stability (12 years)	±200 ppb
Output power	9 dBm
Typical phase noise @100 MHz (@10 Hz)	-100 dBc/Hz
Typical phase noise @100 MHz (@100 Hz)	-125 dBc/Hz
Typical phase noise @100 MHz (@1 kHz)	-150 dBc/Hz

[price on request](#)

NEW



RAKON LIMITED

NewSpace GNSS Receiver

NewSpace multi-constellation GNSS receiver for CubeSat and small satellite position, navigation, and timing applications.

Type	Multi-constellation GNSS receiver
Configurations	SINGLE, DUAL, TIMING, DB
Product Class	NewSpace
Application	Satellite PNT (Position, Navigation, Timing)

[price on request](#)

[datasheet](#)



RAKON LIMITED

NewSpace S-Band Transceiver

Integrated NewSpace S-band transceiver subsystem for CubeSat and small satellite TT&C (Tracking, Telemetry and Command) communications.

Frequency Band	S-band
Type	Integrated transceiver (Tx + Rx)
Application	CubeSat and small satellite TT&C
Product Class	NewSpace

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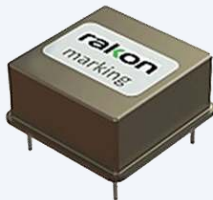
RAKON LIMITED

RK300 Space TCXO

Hi-Rel space temperature-compensated crystal oscillator (10–100 MHz, $\leq \pm 0.5$ –5 ppm) for satellite frequency reference applications.

Frequency Range	10–100 MHz
Frequency Stability	$\leq \pm 0.5$ –5 ppm over temperature
Dimensions	20 × 20 × 13 mm
Type	TCXO (Temperature-Compensated Crystal Oscillator)
Product Class	Hi-Rel Space

[price on request](#) [datasheet](#)



RAKON LIMITED

RK300NS NewSpace TCXO

NewSpace TCXO at 80 and 100 MHz with ± 2 –4 ppm stability for small satellite and CubeSat frequency reference.

Frequency	80 MHz / 100 MHz
Frequency Stability	± 2 –4 ppm
Type	TCXO (NewSpace grade)
Product Class	NewSpace

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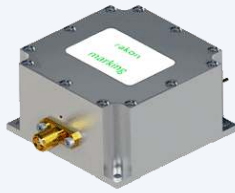
RAKON LIMITED

RK409AV Ultra-Stable Space OCXO

Ultra-stable space OCXO at 10/10.23/10.24 MHz with 2.5×10^{-13} Allan deviation at 1s for navigation satellite and scientific mission timing.

Frequency	10 MHz / 10.23 MHz / 10.24 MHz
Frequency Stability	10^{-9}
Allan Deviation	2.5×10^{-13} @ 1s averaging time
Dimensions	60 × 60 × 32 mm
Type	Ultra-Stable OCXO
Product Class	Hi-Rel Space
Applications	Navigation satellite payloads, deep space probes, scientific missions

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RAKON LIMITED

RK409NS NewSpace OCXO

NewSpace OCXO with 10–125 MHz range and ± 1 –1000 ppb frequency pulling for LEO constellations and CubeSat timing.

Frequency Range	10–125 MHz
Frequency Pulling Range	± 1 –1000 ppb
Type	OCXO (NewSpace grade)
Product Class	NewSpace
Target Applications	LEO constellations, CubeSats, small satellites

[price on request](#) [datasheet](#)



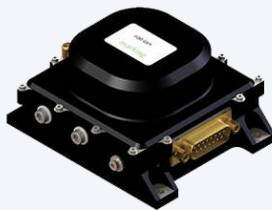
RAKON LIMITED

RK410 High Reliability Space OCXO

MIL/ECSS-qualified space oscillator with 10^{-10} stability class, used operationally by international space agencies for decades.

Package size (LxWxH)	99 x 88 x 54 mm
Nominal frequency	5 to 10 MHz
Stability class	10^{-10}
Temperature range	0 to 60 C / -20 to 60 C / -30 to 60 C (variants)
Allan deviation (ADEV)	1-10s: 2×10^{-13}
Long term stability	$\leq \pm 20$ ppb/year, $\leq \pm 50$ ppb/15 years
Phase noise (max)	-122 dBc/Hz @1Hz, -140 dBc/Hz @10Hz, -145 dBc/Hz @100Hz, -146 dBc/Hz @1kHz (@10 MHz)

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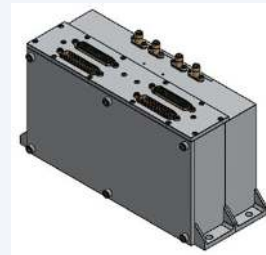
RAKON LIMITED

RK410 Space OCXO

High-reliability space-qualified oven-controlled crystal oscillator (5–10 MHz) with 10^{-10} stability for precision satellite timing.

Frequency Range	5–10 MHz
Frequency Stability	10^{-10}
Phase Noise	-122 dBc/Hz @ 1 Hz offset
Dimensions	99 x 88 x 54 mm
Type	OCXO (Oven-Controlled Crystal Oscillator)
Product Class	Hi-Rel Space
ESCC QPL	Yes (first in class globally, 2021)

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RAKON LIMITED

Space Solutions (Frequency Control Solutions)

Rakon offers space-qualified frequency control solutions, including oscillators and timing modules, designed to withstand extreme space environments for various space applications.

Type	Integrated Master Reference Oscillator subsystem
Variants	NewSpace (NS MRO), NewSpace Compact (NS MRO Compact), Hi-Rel (HR MRO)
Product Class	NewSpace / Hi-Rel Space

[price on request](#) [datasheet](#)

Contact Rakon Limited

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

<https://newspacemarket.com/companies/rakon/>

<https://www.rakon.com>

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