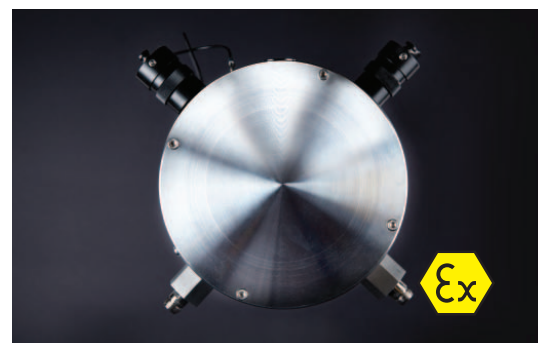




CREOWAVE
SOLUTIONS FOR EXTREMES



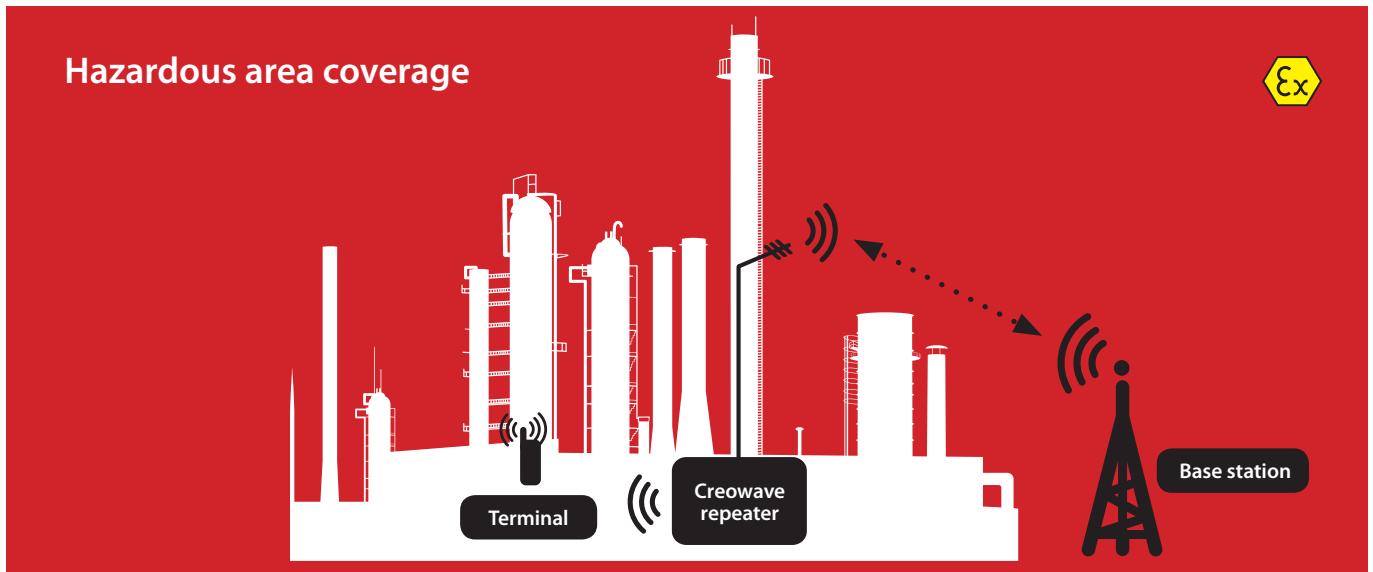
TETRA HAZARDOUS AREA COVERAGE

TETRA Repeaters to enhance the TETRA network coverage in hazardous area locations





The business area of Professional Radio provides a wide range of TETRA coverage solutions to enhance the TETRA network coverage worldwide. Creowave offers high-class TETRA repeaters for indoor and outdoor locations as well for tunnels and hazardous areas.



Reliable and effective public safety communication is crucial while managing critical and life threatening situations. The TETRA network used by authorities worldwide is the leading technology to handle the public safety communication. To ensure the perfect function of TETRA network also in extreme environments that have weak TETRA coverage or lacks the coverage totally, Creowave Oy provides smart TETRA coverage solutions with high-class TETRA repeaters. Hazardous areas and explosive atmospheres are typical locations that have stringent requirements for the equipment placed there. To be able to

place equipment to these hazardous areas it needs to have ATEX certificate. Creowave Oy provides unique ATEX certified TETRA repeaters that can be placed up to Zone 1.

TETRA Hazardous Area Coverage is presented here with Creowave TETRA repeater types suitable for the hazardous area locations.

Typical Hazardous Area installation locations:

- Oil and gas industries
- Oil refineries
- Chemical factories etc.

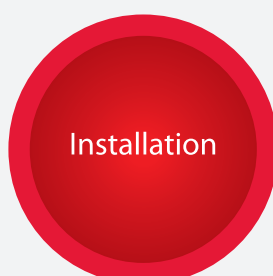
Creowave TETRA Services



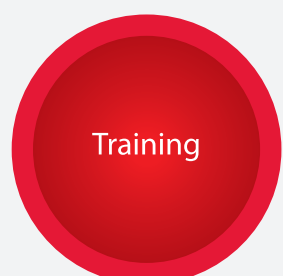
Consultation



Coverage
planning



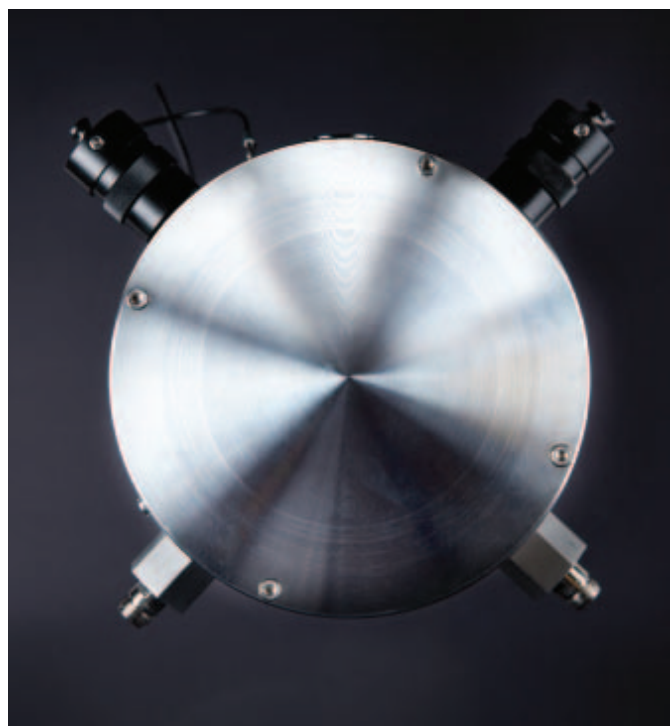
Installation



Training

TETRA REPEATERS FOR HAZARDOUS AREA LOCATIONS

Creowave TETRA Repeaters for hazardous area environments are presented below. Repeaters can be used in various combinations to build the best, most reasonable and cost-effective TETRA network coverage to the site. Creowave Oy provides TETRA services from consultation, coverage planning and installation to training to supply the comprehensive and turn-key coverage solution.



TETRA ATEX REPEATER

TETRA ATEX Repeater is a unique band selective repeater ensuring the connection between the TETRA base station and TETRA handheld device in hazardous areas where unconditional ATEX requirement needs to be met. TETRA ATEX repeater can be placed to hazardous areas requiring ATEX certificate and can be placed up to Zone 1. The repeater can be configured on site or remotely through Creowave Repeater Manager Software.

Sometimes the coverage can be built from the safe area. Without safe areas TETRA ATEX Repeater is the right repeater type for hazardous area coverage.

Creowave standard TETRA repeaters for hazardous area locations

Creowave TETRA Specification

Frequency Bands	380–385 MHz / 390–395 MHz	Adjacent Channel Power max.	-36 dBm
	385–390 MHz / 395–400 MHz		
	410–415 MHz / 420–425 MHz	Output Power Adjustment Range	40 dB, step 0.5 dB
	415–420 MHz / 425–430 MHz		
	450–455 MHz / 460–465 MHz	Gain	40–70 dB, step 0.5 dB
	806–824 MHz / 851–869 MHz		
	For other frequency band variations, contact your dealer of the manufacturer	Power Supply	+12 VDC
Maximum Output Power	+17 dBm (with 1 carrier)	RF Connectors	2 x N (f)
	+14 dBm (with 2 carriers)		
	+11 dBm (with 4 carriers)	Compliant to	TETRA / TEDS
	+8 dBm (with 8 carriers)		TS 101789-1
			EN 303035-1

TETRA ATEX Repeaters	Maximum Gain : 70 dB	Maximum Output Power (with one carrier): +17 dBm		
Frequency Bands	Uplink / Downlink	Options: Ethernet	G	CWR Type
380 MHz	380-385 MHz / 390 -395 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 380 TA 2
385 MHz	385-390 MHz / 395 - 400 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 385 TA2
410 MHz	410-415 MHz / 420-425 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 410 TA 2
412 MHz	412-417 MHz / 422-427 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 412 TA 2
415 MHz	415-420 MHz / 425-430 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 415 TA 2
450 MHz	450-455 MHz / 460-465 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 450 TA 2
453 MHz	453-458 MHz / 463-468 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 453 TA 2
458 MHz	458-460 MHz / 468-470 MHz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CWR 458 TA 2

Option G = GSM Modem **NB** = Narrow Band
ATEX Classification II2G Ex demb[ib]IIBT5.

Creowave Oy is the leading company in providing Radio Frequency & Microwave Electronics solutions for extreme environments. The company develops, produces and markets solutions on three business areas - Professional Radio, Radio Testing and Industrial Measurement. www.creowave.com

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