

RADIOMODEM

D1 Series

General description

The D1 Series (RMO) are radiomodems with RS232 and RS485 serial connections, configurable by software, either remotely or locally, on the fly by DTE.

Four operating modes that are software programmable: mirror point to point, point to multipoint, broadcasting, and digipeater which allows multipath data routes, to ensure data delivery.

The Low power design along with the power saving function, allows for extended battery life.

Robust construction with surface mounted components, ensure highly-stable electronics. Enclosure options allow the D1 Series to be located indoors or outdoors.

Optional antenna configurations can improve radio transmissions where radio coverage is critical

FOR TECHNICAL SPECIFICATION, INSTALLATION AND CONFIGURATION INSTRUCTION AND MORE DETAILS DOWNLOAD FROM OUR WEB SITE WWW.EREWIRELESS.COM THE D1 USER MANUAL

Technical support

Our website www.erewireless.com contains many useful information, user guides and configuration software and technical documents always update to the latest version.

If you have technical problems or cannot find the required information in the provided documents, contact our Technical Support by email at info@erewireless.com or by phone +39 0385 48139

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Restrictions on use

ERE PRODUCTS HAVE NOT BEEN DESIGNED, INTENDED NOR INSPECTED TO BE USED IN ANY LIFE SUPPORT RELATED DEVICE OR SYSTEM RELATED FUNCTION NOR AS A PART OF ANY OTHER CRITICAL SYSTEM INCLUDED AERONAUTICAL / AEROSPACE APPLICATION. ERE PRODUCTS ARE GRANTED NO FUNCTIONAL WARRANTY IF THEY ARE USED IN ANY OF THE APPLICATIONS MENTIONED.

ERE D110 Series radio modems have been designed to operate on frequency ranges as SRD (Short Range Device), the exact use of which differs from one region and/or country to another. The user of a radio modem must take care that the device is not operated without the permission of the local authorities on frequencies other than those specifically reserved and intended for use without a specific permit. ERE D110 Series are allowed to be used in the following countries with E.R.P. and duty cycle limitation, either on licence free channels or on channels where the operation requires a licence. More detailed information is available at the local frequency management authority. ERE D160, D161, D162, D163 and D164 radio modems have been designed to operate on not free frequency range, the user must require to local authorities the permission to use.

Allowed use according to ERC Recommendation 70-03						
Model	Frequency (MHz)	Annex (1)	E.R.P (2)	Duty Cycle (3)	Country allowed	Country with restriction of use
D110	169,400 – 169,475	1e1	≤ 500 mW	≤ 1 %	AUT-BEL-BUL-CZE-CYP-DNK-EST-FIN-F-D-HRV-GRC-HNG-ISL-IRL-I-LVA-LIE-LTU-LUX-MLT-HOL-NOR-POL-POR-ROU-SVK-SVN-E-SUI-S-G-AND-ALB-AZE-BIH-BLR-GEO-MDA-MKD-MNE-RUS-SRB-TUR-UKR	GEO-RUS-UKR-BLR
D110	169,400 – 169,475	2b	≤ 500 mW	≤ 10 %	AUT-BEL-BUL-CZE-CYP-DNK-EST-FIN-F-D-HRV-GRC-HNG-ISL-IRL-I-LVA-LIE-LTU-LUX-MLT-HOL-NOR-POL-POR-ROU-SVK-SVN-E-SUI-S-G-AND-ALB-AZE-BIH-BLR-GEO-MDA-MKD-MNE-RUS-SRB-TUR-UKR	HOL-GEO-RUS-BLR-UKR

NOTE:

Before to install the device check always the latest version of ERC Recommendation 70-03 in order to verify any restriction and limitation in terms of E.R.P and Duty Cycle

(1) Annex 1.xxx refer to SRD (Short Range Device), Annex 2 refer to (Tracking, Tracing and Data Acquisition)

(2) E.R.P. = Max Effective Radiated Power allowed from radiomodem and associated antenna takes into consideration transmitter power output, transmission line attenuation, RF connector insertion losses and antenna gain

(3) Duty Cycle is defined as the ratio, expressed as a percentage, of the maximum transmitter "on" time on one carrier frequency, relative to a one hour period

Warnings and safety instructions

- Read these safety instructions carefully before using the product:
- Warranty will be void, if the product is used in any way that is in contradiction with the instructions given in this manual, or if the radio modem housing has been opened or tampered with.
- The radio modem is only to be operated at frequencies allocated by local authorities, and without exceeding the given maximum allowed output power ratings and duty cycle. ERE and its distributors are not responsible, if any products manufactured by it are used in unlawful ways.
- The devices is complies with Directive 1999/5/EC as describe in our declaration of conformity above
- The devices mentioned in this manual are to be used only according to the instructions described in this manual. Faultless and safe operation of the devices can be guaranteed only if the transport, storage, operation and handling of the devices is appropriate. This also applies to the maintenance of the products.
- Do not install the equipment close to a heat source or in damp conditions and direct sunlight is also to be avoided.
- The device must not be exposed to aggressive chemical agents or solvents likely to damage the plastic or corrode the metal parts.
- The device must not be exposed directly to dusty environment.
- Maintenance should only be carried out by qualified persons.
- For your own safety, you must ensure that the equipment is switched off before carrying out any work on it.
- Any electrical connection of the product must be equipped with a protection device against voltage spikes and short-circuits

Disposal of waste by users in private households within the European Union



According to Directive 2012/19/EU of the European Union on waste electrical and electronic equipment (WEEE) this product must not be disposed off with your other household waste, it is your responsibility to dispose of your waste by taking it to a collection point designated for the recycling of electrical and electronic appliances.

Separate collection and recycling of your waste at the time of disposal will contribute to conserving natural resources and guarantee recycling that respects the environment and human health.

For further information concerning your nearest recycling centre, please contact your nearest local authority/town hall offices.

Conformity declaration

English: Hereby, ERE S.r.l. declares that this D1 SERIES is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Finnish: ERE S.r.l. vakuuttaa täten että D1 SERIES tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Dutch: Hierbij verklaart ERE S.r.l. dat het D1 SERIES in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG. Bij deze verklaart ERE S.r.l. dat deze D1 SERIES voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

French: Par la présente ERE S.r.l. déclare que l'appareil D1 SERIES est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE. Par la présente, ERE S.r.l. déclare que ce D1 SERIES est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables

Swedish: Härmed intygar ERE S.r.l. att denna D1 SERIES står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Danish: Undertegnede ERE S.r.l. erklærer herved, at følgende udstyr D1 SERIES overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF

German: Hiermit ERE S.r.l., dass sich dieses D1 SERIES in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMW). Hiermit erklärt ERE S.r.l. die Übereinstimmung des Gerätes D1 SERIES mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)

Greek: ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ ΕΡΕ S.r.l. ΔΗΛΩΝΕΙ Δ1 SERIES ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ

Italiano: Con la presente ERE S.r.l. dichiara che D1 SERIES è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Spanish: Por medio de la presente ERE S.r.l. declara que el D1 SERIES cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE

Portuguese: ERE S.r.l. declara que este D1 SERIES está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Declaration of Conformity

We, the undersigned,

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certify and declare under our sole responsibility that the following equipment:

Product description / Intended use	169 MHz and 390-470 MHz Radiomodem for commercial and light-industrial use
EU / EFTA member states intended for use	EU: all members EFTA: all members
Member states with restrictive use	EU: all members EFTA: all members
Manufacturer	ERE S.r.l. I-27049 Stradella (PV)
Brand name	ERE
Type/Model	D1 SERIES

is tested to and conforms with the essential requirements for protection of health and the safety of the user and any other person and Electromagnetic Compatibility, as included in following standards:

Art. of Directive	Standard	Date of issue of the standard
3.1(a) Health	EN 50401	2006 + A1(2011)
3.1(a) Safety	EN 60950-1	2006 + A11:2009 + A1:2010 +A12:2011 +AC:2011
3.1(b) EMC	EN 301 489-1	V1.9.2 (2011-09)
3.1(b) EMC	EN 301 489-3	V1.6.1 (2013-08)

and is tested to and conforms with the essential radio test suites so that it effectively uses the frequency spectrum allocated to terrestrial/space radio communication and orbital resources so to as to avoid harmful interference, as included in following standards:

Art. of Directive	Standard	Date of issue of the standard
3.2 Spectrum	EN 300 220-2	V2.4.1 (2012-05)

and therefore complies with the essential requirements and provisions of Art. 3.3 too, where applicable, of the Directive 1999/5/EC of the European Parliament and of the council of March 9, 1999 on Radio equipment and Telecommunications Terminal Equipment and the mutual recognition of their conformity and with the provisions of Annex II.



TCF reference nr.	D1 SERIES Rev.0
Date	February 18, 2015
Sign	
Name and position	Giovanni Soldo - CEO