MultiConnect® mDot™ EVB
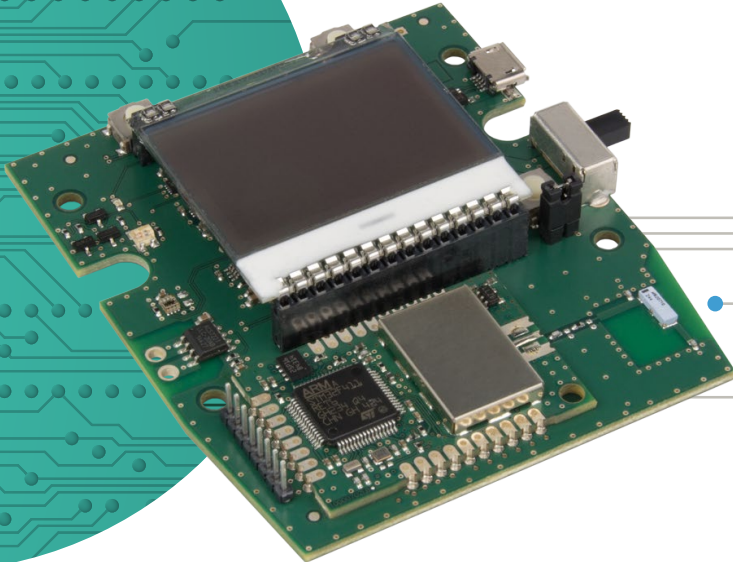
Ideal for quickly creating LoRa® Proof of Concept

arm MBED   LoRa Alliance™

MultiConnect® mDot™ EVB is a portable, LoRa® end-point device that simplifies and speeds up LoRa proof of concept development. It has been designed to assist OEMs and enterprises quickly determine if LoRa is the right technology to solve key industrial IoT issues: how to effectively connect to, and manage, thousands of assets and sensors in the field to meet the cost, performance and strategic needs of the business. With the mDot EVB, users can quickly obtain and evaluate data to see how LoRa technology performs in their unique IoT application. Customizable through Arm® Mbed™ and easy to use, the mDot EVB enables users to make data driven decisions about the fit of LoRa for their use cases.

The mDot EVB features the MultiConnect® mDot™, a low cost programmable LoRaWAN™ ready module, mounted on an application board with an LCD screen for displaying menu and device navigation information as well as network, test mode and sensor status data. Two push button controls are also included providing menu navigation functions. The mDot EVB also has several built in sensors showing temperature, ambient light, pressure, electrical current and a 3-Axis accelerometer. This versatile development tool can be used purely as a communications device or programmed with a custom application using the integrated Arm® Mbed Enabled™ programmable MultiConnect mDot. The mDot EVB was developed to work with any LoRaWAN compliant gateway, including MultiTech's MultiConnect® Conduit™, the industry's most configurable, manageable, and scalable communications gateway.

BENEFITS

- Quickly develop and test LoRa proof of concepts without the need for heavy configuration or embedded design skills

- Measure LoRa distance and building penetration performance for line of sight or urban/obstructed use cases

- View LoRa IoT application data your way – in the Cloud, on the gateway or export directly to your laptop

FEATURES

- LCD screen displays menu options, test mode data as well as sensor data

- Flexibility to operate with any LoRaWAN 1.0.2 compliant gateway

- Supports the European 868 MHz and North America/AU 915 MHz ISM bands

www.multitech.com/mdotevb

MULTICONNECT® MDOT™ EVB

Designed primarily for proof of concept development, the mDot EVB can also be used as a site survey tool that provides information such as spreading factor, throughput, time and date activity and power level usage. Viewing and analyzing site survey data is easy thanks to the versatility of the mDot EVB which provides multiple ways of exporting data, including to the customer's preferred Cloud platform.

Extremely easy to use, customize and manage, the mDot EVB makes evaluating LoRa technology for IoT applications as easy as clicking a button.

Operational Mode	Functional Description
Site Survey Single	In Site Survey Single Mode, the user can test connectivity with the gateway at different data rate and power combinations. Surveys are assigned a survey index so they can be referenced later. The result of each survey, including the survey index, is saved in the Survey Data File.
Site Survey Sweep	In Site Survey Sweep Mode, connectivity with the gateway is tested over a range of power levels and data rates. Sweeps are assigned a sweep index so they can be referenced later. The result of each sweep, including the sweep index and the results of every survey in the sweep, is saved in the Survey Data File. The user can configure the minimum and maximum data rates and power levels to use for sweeps using Configuration Mode.
Demo	LoRa Demo Mode demonstrates a typical use case for a MultiConnect mDot. Sensor data is gathered and updated on the screen in real time. The sensor data is also sent to the gateway periodically at a user defined interval or triggered on the push of a button, depending on the mode of operation selected.

PACKAGE CONTENTS
· MTDOT-EVB Evaluation and Development Board (868 or 915 MHz)
· Programming Cable
· Quick Start Guide

ORDERING INFORMATION

North American Model
Model	Description	Region
MTDOT-EVB-915	LoRa Evaluation and Development Board - 915 MHz	NAM

European Model
Model	Description	Region
MTDOT-EVB-868	LoRa Evaluation and Development Board - 868 MHz	EU/GB

Australian Model
Model	Description	Region
MTDOT-EVB-915-AU	LoRa Evaluation and Development Board – AU915 MHz	AU

Developer Kit and Accessories
(One of the following Developer Kits is required if custom firmware development is desired.)

Model	Description	Region
MTUDK2-ST-MDOT	Developer Kit, includes RP SMA antenna & USB cable (mDots sold separately)	Global
MTMDK-ST-MDOT	MultiConnect mDot Micro Developer Kit	Global
AN868-915A-1HRA	868-915 MHz RP-SMA Antenna, 8" (3.0dBi)	Global

Related Products
Model	Description	Region
MTDOT-BOX-G-915-B	LoRa Evaluation and Site Survey Box w/GPS – 915 MHz	NAM
MTDOT-BOX-G-868-B	LoRa Evaluation and Site Survey Box w/GPS – 868 MHz	EU/GB
MTDOT-BOX-G-915-AU-B	LoRa Evaluation and Site Survey Box w/GPS – AU915 MHz	AU

Go to www.multitech.com for detailed product model numbers.

See the MultiConnect mDot home page for addition information and product specifications.

SERVICES & WARRANTY
MultiTech's comprehensive Support Services programs offer a full array of options to suit your specific needs. These services are aimed at protecting your investment, extending the life of your solution or product, and reducing total cost of ownership. Our seasoned technical experts, with an average tenure of more than 10 years, can walk you through smooth installations, troubleshoot issues and help you with configurations.

INSTALLATION SUPPORT
MultiTech's Installation Support Service delivers priority service with the ability to work one-on-one with an experienced MultiTech technical support engineer, to guide you through the installation process for our products.

TECHNICAL SUPPORT SERVICES
At MultiTech, we're committed to providing you personalized attention and quality service while providing you a quick response to your product support needs. We have several options of support for you to choose from.

For additional information on Support Services as well as other service offerings, please contact your MultiTech representative or visit www.multitech.com/support.go

World Headquarters
Multi-Tech Systems, Inc.
2205 Woodale Drive
Mounds View, MN 55112 U.S.A.
Tel: 763-785-3500
Toll-Free: 800-328-9717
Email: sales@multitech.com
www.multitech.com

EMEA Headquarters
Multi-Tech Systems (EMEA)
Strata House
264-270 Bath Road
Harlington UB3 5JJ
United Kingdom
Tel: +(44) 118 959 7774
Email: sales@multitech.co.uk
www.multitech.co.uk

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