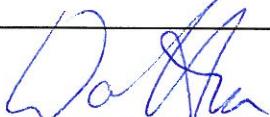


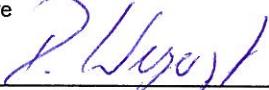
title  
M21 Reader Module: Class II Permissive Change Letter

responsible Gerd Wotha	creating system MS-Word
author Gerd Wotha	document type doc
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### 1. Purpose

Dräger Medical's devices are equipped with a technology that identifies accessories connected to the devices, and enables communication between them.

Specific data can be stored on an internal memory chip on the accessory.

With this features improved product functionality are provided for customers. The technology is referred to as Electronic Accessory Signature Technology (EAST).

This document describes the changes of the M21 Reader Module for achievement of additional technical requirements according to Japanese ARIB Standards for Radio Systems in the Field of Telecommunications STD-T82.



## 2. Product

### RFID Reader Module

Name	Part number	Revision old	Revision new
Module M21	MP02001	Rev. 16	Rev. 17
Module M21.2	MP02101	Rev. 03	Rev. 04

## 3. Modification

### 3.1. New Requirement

The frequency tolerance at 13,56 MHz of the Module was not adequate for the Japanese ARIB Standards for Radio Systems in the Field of Telecommunications STD-T82.

Requirement	Tolerance in kHz	Tolerance in PPM
EU / FCC / IC	± 7000 Hz	± 516 ppm
Japan	± 678 Hz	± 50 ppm

### 3.2. Description of change

The specification for the crystal which is responsible for the RFID carrier frequency was changed; the maximum allowed tolerance was lowered:

Cristal	Old	New
Carrier frequency	13,560000 MHz	13,560000 MHz
Operating temperature	-20°C to 85°C	-20°C to 85°C
Tolerance Frequency	30 ppm	15 ppm
Tolerance Temperature	50 ppm	15 ppm