

Wireless Remote Control II



OE

Integration Manual Wireless Module S5H-WRCII

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D. Sierk
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History

Document History

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Table of Contents

History 2

Table of Contents 3

List of Tables 4

1 Purpose of the document..... 5

2 General..... 6

3 Antenna notes 6

4 Integration 6

5 Identification / Label 7

SIEMENS Medical Solutions, P41
 10096417 EDS 01S 00
 Convert date: 2009-05-18T16:19:06-02:00
 For signatures see info sheet (appended page)
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List of Tables

Table 1 Tested antennas..... 6

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10096417 EDS 01S 00
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For signatures see info sheet (appended page)
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1 Purpose of the document

The purpose of this document is to describe the integration of the wireless module *S5H-WRCII* into final *Siemens Healthcare* products.

This module is based on Mitsumi WML-C46NHN Bluetooth Module by a change ID Identification procedure according to §2.933.

This document shows the implementation of the mentioned module with the tested antennas.

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2 General

The Bluetooth Module *S5H-WRCII* is based on the Mitsumi Module WML-C46NHN with the following specifications:

Supply voltage:	2,8V -3,4V
Carrier Frequency:	2402MHz – 2480MHZ
Modulation Method:	GFSK, note 1
Data Rate:	max 1Mbit/s, note1
Hopping scheme:	FHSS, $F = 2402\text{MHz} + k \mid k=0 \text{ to } 78$
RF impedance:	50 Ohms
Output power:	0dBm (1mW)

Note 1: Any other modulation method shall not be used with the module *S5H-WRCII*. Therefore the maximum data rate is limited to 1Mbit/s.

3 Antenna notes

Additional to the listed antennas by the origin grantee *Mitsumi* two types of antennas were tested:

Manufacturer	Product description	Gain (dBi)
gigaAnt	Rufa 2.4 GHz SMD Antenna	4,1
Siemens AG, Healthcare Sector	Patch antenna	3,6

Table 1 Tested antennas

All antenna connectors are internally in the final product. There is no external antenna connector provided.

The manufacturer Siemens AG, Healthcare Sector integrates only the above listed antennas for the final product.

4 Integration

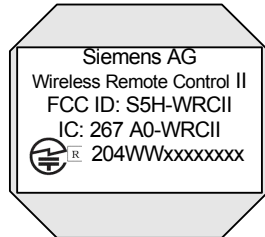
This module will be only integrated into Siemens Healthcare medical devices. It is not intended to resell the module with the *S5H-xxxx* grant.

Siemens AG, Healthcare Sector is responsible to provide all relevant approvals (FCC, EMC, electrical and mechanical safety) for the final product.

5 Identification / Label

A: Labeling of the module:

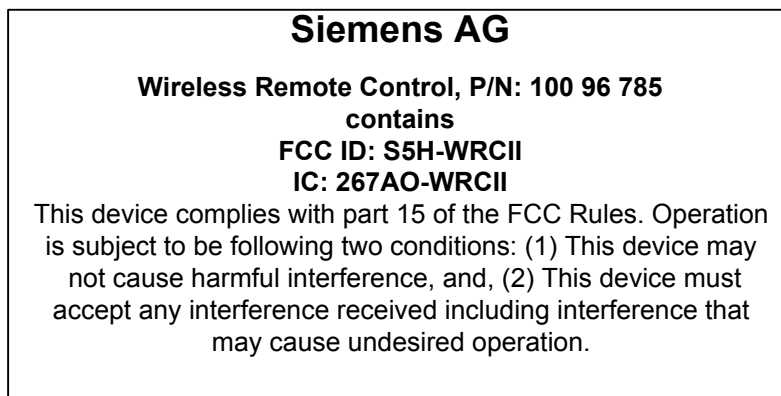
The module is tagged by label as follow:



B: Labeling of the final product

The device is labeled in accordance to the FCC rules for modular approvals.

e.g. The device is labeled as follow:



This label will be placed on the final product clearly visible to all persons who handle this product. The dimensions of the label are dependent on the size of the product, but in any case clearly visible to all involved persons.

SIEMENS Medical Solutions, P41
10096417 EDS 01S 00
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SIEMENS Medical Solutions, P41
10096417 EDS 01S 00
Convert date: 2009-05-18T16:19:06-02:00
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Page 1 of 1

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