TOYOTA

MATERIAL HANDLING

Reference	Document Name	Page no
DFR/Linus Helgesson	DHU4_label_spec	1(6)
Date	**Doc No**	**Issue**
2022-03-10	DHU4 Label Specification	6

DHU4
Label Specification

1 Revision history

Issue	Date	Name	Action
1-draft	2020-12-14	DFR/Linus Helgesson	First draft
1	2021-02-02	DFR/Linus Helgesson	First release
2	2021-02-17	DFR/Linus Helgesson	Updated label image 20210: Added requirement on TMHMS address
3	2021-02-19	DFR/Linus Helgesson	10150: Clarification around placeholders.
4	2021-05-25	DFR/Linus Helgesson	Updated image 1
5	2021-11-23	DFR/Linus Helgesson	Updated image 1 20160: removed static QR-code requirement 30120, 30130, 30140: added dynamic QR-code requirements
6	2022-03-10	DFR/Linus Helgesson	Updated image 1 10120: Added measurement drawing 20110, 20120: Added final FCC/IC ID 20220, 20230: Added IP and electrical supply

2 General

2.1 Notation

New, changed or removed requirements shall be indicated in the revision history. Requirement numbers shall not be re-used.

2.2 Abbreviations

CE	Conformité Européenne
DC	Direct Current
DHU4	Data Handling Unit generation 4
ECU	Electronic Control Unit
FCC	Federal Communications Commission
I_Site	Toyota Material Handling fleet management system
IMEI	International Mobile Equipment Identity
IP	Ingress Protection
TMHMS	Toyota Material Handling Manufacturing Sweden
UUID	Universally Unique IDentifier
WEEE	Waste Electrical and Electronic Equipment Directive
QR-code	Quick Response code, 2D code for optical scanning

2.3 References

[1]	*Graphics_200819.ai, Vector image DHU4 label*
[2]	*RFC 4122 UUID namespace*

2.4 Description

This document specifies requirements on the label that is laser printed on the top surface of the DHU4 telematics ECU.

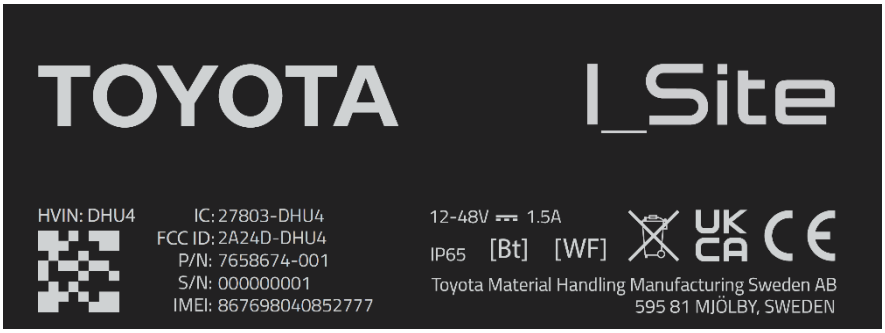
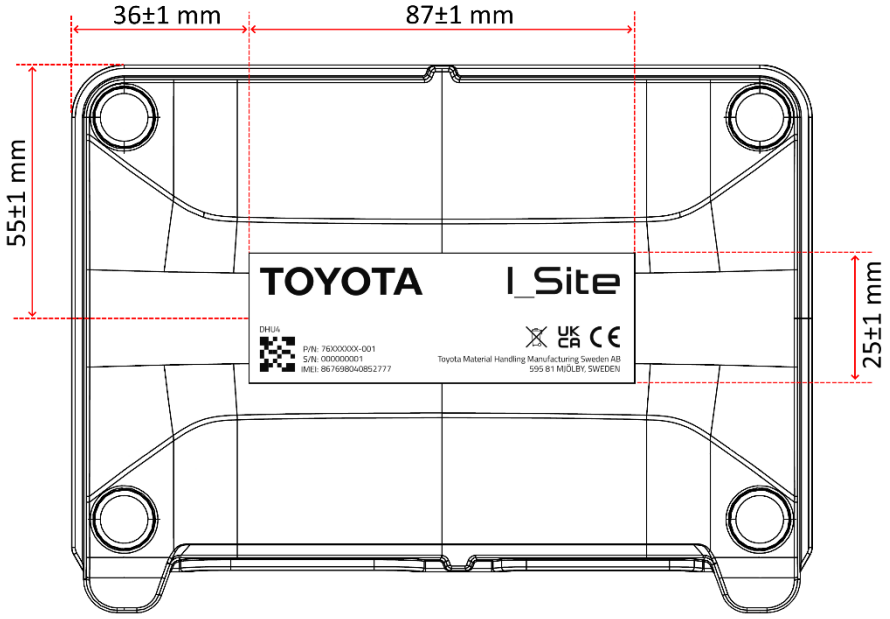


Image 1 - Example label

3 Requirements

3.1 General

Req. no.	Parameter	Specification
10100	Layout	The label layout shall be according to [1]
10120	Position	The label position shall be centered on the top surface. According to drawing below: 
10130	Resolution	The label resolution shall be high enough that all text is easily readable, and the QR-code can be scanned reliably.
10140	Font	The font for the textual content (except Toyota and I_Site logotypes) shall be Helvetica Neue Bold75.
10150	Placeholders	There shall be a placeholder for WiFi and/or Bluetooth symbols shown as [WF] and [BT] in [1]. These shall be left blank for DHU4. TMHMS may in the future decide to certify the product for WiFi and/or Bluetooth.

3.2 Static Contents

Req. no.	Parameter	Specification
20100	Product name	DHU4
20110	Part number	TMHMS part number: **7658674-001**
20120	FCC ID	FCC registration id: **2A24D-DHU4**
20130	IC	IC number for Canadian registration: **27803-DHU4**
20140	Toyota logo	The Toyota logotype shall be according to [1]
20150	I_Site logo	The I_Site logotype shall be according to [1]
~~20160~~	~~QR code~~	~~The QR code shall contain the static URL:~~

Req. no.	Parameter	Specification
20170	CE	The label shall contain a CE symbol
20180	FCC	The label shall contain a FCC symbol
20190	WEEE	The label shall contain a WEEE symbol
20200	Origin mark	Indicating production country
20210	TMHMS Address	Address to TMHMS: **Toyota Material Handling Manufacturing Sweden AB** **595 81 MJÖLBY, SWEDEN**
20220	Ingress protection	The label shall be marked with **IP65** class ingress protection
20230	Electrical supply	The label shall be marked with **12-48 VDC 1.5 A** electrical supply

3.3 Dynamic contents

Req. no.	Parameter	Specification
30100	IMEI	The IMEI number shall be read from the cellular module in production and printed on the label.
30110	Serial number	The ECU serial number shall be assigned in production and printed on the label. The serial number shall be a 9-digit running number starting from 000000001. Can optionally be prepended by production year/week e.g. 2104000000001.
30120	QR code	The QR code shall contain the URL: https://t-qrscan.toyota-forklifts.eu/<UUID> Where the <UUID> is generated according to 30130
30130	UUID	The UUID shall be 32 displayed in five groups separated by hyphens, in the form 8-4-4-4-12 for a total of 36 characters (32 hexadecimal characters and 4 hyphens). Example: a6298b8a-8768-40bf-a5d8-4616862b0d3c xxxxxxxx-xxxx-Mxxx-Nxxx-xxxxxxxxxxxx The four bits of digit M are the UUID version, and the 1 to 3 most significant bits of digit N code the UUID variant. In the example, M is 1, and N is a (10xx2), meaning that this is a version-4, variant-1 UUID a. Variant: Shall be Variant 1 i.e 10xx2 according to [2] Version: Shall be Version 4 according to [2] which is randomly generated.
30140	Production data	All dynamic label content, including UUID, shall be provided to TMHMS as a part of the production data