

From
PT-MT/PXP1

Our Reference
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Leinfelden
11 January 2022

Report

Issue 1.0
Topic **PS85 – FCC Waiver Conditions**
Description This document describes how the FCC Waiver conditions (DA-22-8A1) are met.

The PS85 is a device variant of the Bosch D-tect 200 sold under Hilti brand.

Condition 1

The PS85 single hop step shall have a bandwidth of less than 1 kHz.

Yes. See operation description.

Condition 2

The intentional emissions generated by the PS85 must be completely contained within the 1.8 to 5.7 GHz frequency range.

Yes. See operation description.

Condition 3

The PS85 shall operate with frequency hopped modulation in 30 steps between 1.8 and 5.7 GHz.

Yes. See operation description.

Condition 4

The PS85 maximum average transmission on-time shall be no less than 50 microseconds, the average transmission off-time shall be 15 microseconds or less. The maximum of the average ramp time shall be 2.3 milliseconds, resulting the maximum average dwell time to be 77 microseconds (2.3 milliseconds / 30 steps = 77 microseconds).

Yes. See operation description.

Condition 5

The device shall include a feature to ensure that it will only transmit when placed in contact with

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or close proximity to the building structure being measured and/or evaluated.

Yes. See document on “TX disabling logic”.

Condition 6

The PS85 will not transmit continuously and will cease transmission 10 seconds after no movement.

Yes. See document on “TX disabling logic”.

Condition 7

For certification testing, the measurement of the emissions from the Bosch PS85 shall be conducted with the hopping function active.

The hopping function has been active for all measurements contained in the test reports as it is active for the series device, if not stated differently.

Condition 8

The PS85 devices shall comply with all other technical and operational requirements applicable to UWB wall imaging devices under Part 15, Subpart F of the Commission’s rules.

See the test report included.

Condition 9

The waiver conditions granted herein are not transferable to any third party via §2.933 or any other means of technology transfer.

The waiver will only be used by Robert Bosch LLC and its affiliates including private label customers as discussed with the FCC.

Condition 10

This waiver and its conditions shall apply only to the UWB devices described herein and are not to be considered to apply generally to any other UWB operations where further analysis would be necessary to assess the potential for impact to other authorized users.



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We are aware of this.

Condition 11

The total U.S. sales of D-tect 200/PS85 devices shall not exceed 6000 devices, annually.

Robert Bosch LLC will ensure to limit the sales to the stated number for the sum of devices from Bosch and its affiliates including private label customers. A reporting of the quantities from the records is possible upon request.

Condition 12

The PS85 device shall not be marketed for retail consumer markets. The PS85 device will be used by those engaged professionally in the building and construction trades.

- \$1.300 USD (w/o battery and charger) recommended retail price is high compared to stud finders or common multi detectors in the market (\$50-\$200), is not likely a not professional user spends this money in this tool.
- Hilti tools are for professional use only and distributed via direct sales (a Hilti employee is delivering the tool directly to the customer) to professional construction customers and are available online for key account customers registered as professional construction customers.
- Battery platform fits to other Hilti professional tools only
- The packaging includes labelling stating "For professional use only."
- The user manual states that "Device operation is limited to those engaged professionally in the building and construction trades."

Condition 13

The PS85 device package shall include labelling stating "For professional use only."

See packaging artwork.

Condition 14

The user manual for the PS85 will clearly state that "Device operation is limited to those engaged professionally in the building and construction trades."

See operating instructions, page 8.



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3.2 Intended use

The product described is a wall scanner. It is designed to detect objects such as ferrous metals (reinforcing bars), non-ferrous metals (copper, aluminum), wooden beams, plastic pipes, lines and electric cables in dry materials.

Device operation is limited to those engaged professionally in the building and construction trades.

Condition 15

Upon grant of this waiver, Bosch will abide by its commitment to no longer manufacture equipment under the waiver, DA 11-899, granted by OET on May 23, 2011 in ET Docket No. 10- 253.

The production of the D-tect150 and private label variants (under the waiver DA 11-899) has been stopped before the waiver grant and will not be started again.

Condition 16

A copy of this Order shall be provided with the application for certification of the device.

A copy of the waiver is included with the filing.

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