

Regulatory

Note: Operation in the 5150-5250 MHz band is limited to indoor use only.

Certified Antennas

The SDC-PE15N provides two Hirose U.FL type antenna connectors to support transmit and receive diversity. For single antenna, non-diversity applications, OEMs are advised to use the Main (not Aux) antenna connector and should disable transmit and receive diversity from the Global tab of the Summit Client Utility (SCU) software utility.

The SDC-PE15N has been tested to the regulatory standards defined in the “Certifications” section of the Specifications table above. These tests were conducted with the following antennas:

[Summit SDC-CF22G Antenna](#) (click for datasheet)

- **Form Factor:** Chip Antenna on PCB
- **Type:** Dipole
- **Maximum 2.4 GHz Gain:** 0 dBi

[Cisco AIR-ANT 4941](#) (click for datasheet)

- **Form Factor:** Whip
- **Type:** Dipole
- **Maximum 2.4 GHz Gain:** 2.2 dBi
- **Tested and Certified 2.4 GHz Transmit Power:** 90% of maximum setting (power must be reduced to 90%)

[Radiall Larson Dipole](#) (click for datasheet)

- **Form Factor:** Whip
- **Type:** Dipole
- **Maximum 2.4 GHz Gain:** 1.6 dBi (not used during testing)
- **Maximum 5 GHz Gain:** 5 dBi

[HUBER+SUHNER](#) (click for datasheet)

- **Form Factor:** Whip
- **Type:** Monopole
- **Maximum 2.4 GHz Gain:** 3 dBi
- **Maximum 5 GHz Gain:** 6.5 dBi
- **Tested and Certified 2.4 GHz Transmit Power:** 95% of maximum setting (power must be reduced to 95%)
- **Tested and Certified 5 GHz Transmit Power:** 100% of maximum setting (no reduction of power is required in the 5 GHz band)

Antennas of differing types and higher gains may be integrated as well. With the Summit Manufacturing Utility software utility, OEMs may reduce the transmit power of the SDC-PE15N to account for higher antenna gain when necessary. In some cases, OEMs may be able to reduce certification efforts by using antennas that are of like type and equal or lesser gain to the above listed antennas.

Documentation Requirements

In order to maintain regulatory compliance, when integrating the SDC-PE15N into a host device and leveraging Summit's grants and certifications, it is necessary to meet the documentation requirements set forth by the applicable regulatory agencies. The following sections (FCC, Industry Canada, and European Union) outline the information that must be included in the user's guide and external labels for the host devices into which the SDC-PE15N is integrated.

FCC

User's Guide Requirements

As outlined in the Operational Description, the SDC-PE15N complies with [FCC Part 15 Rules](#) for a Limited Modular Approval. To leverage Summit's grant, the two conditions below must be met for the host device into which the SDC-PE15N is integrated:

1. The antenna is installed with 20 cm maintained between the antenna and users.
2. The transmitter module is not co-located with any other transmitter or antenna that is capable of simultaneous operation.

As long as the two conditions above are met, further *transmitter* testing is typically not required. However, the OEM integrator is still responsible for testing its end-product for any additional compliance requirements required with this module installed, such as (but not limited to) digital device emissions and PC peripheral requirements.

IMPORTANT!

In the event that the two conditions above **cannot be met** (for example certain device configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID **cannot** be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

When using Summit's FCC grant for the SDC-PE15N, the integrator must include specific information in the user's guide for the device into which the SDC-PE15N is integrated. The integrator must not provide information to the end user regarding how to install or remove this RF module in the user's manual of the device into which the SDC-PE15N is integrated. The following FCC statements must be added in their entirety and without modification into a prominent place in the user's guide for the device into which the SDC-PE15N is integrated:

"IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all

persons and must not be co-located or operating in conjunction with any other antenna or transmitter.”

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

1. Reorient or relocate the receiving antenna.
 2. Increase the separation between the equipment and receiver.
 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 4. Consult the dealer or an experienced radio/TV technician for help.
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FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE: FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Labeling Requirements

The final end product must be labeled in a visible area with the following notice:

Contains FCC ID: TWG-SDCPE15N

Industry Canada

User's Guide Requirements

As outlined in the Operational Description, the SDC-PE15N complies with Industry Canada (IC) rules for a Limited Modular Approval. To leverage Summit's grant, the two conditions below must be met for the host device into which the SDC-PE15N is integrated:

1. The antenna is installed with 20 cm maintained between the antenna and users.
2. The transmitter module is not co-located with any other transmitter or antenna that is capable of simultaneous operation.

As long as the two conditions above are met, further *transmitter* testing is typically not required. However, the OEM integrator is still responsible for testing its end-product for any additional compliance requirements required with this module installed, such as (but not limited to) digital device emissions and PC peripheral requirements.

IMPORTANT!

In the event that the two conditions above **cannot be met** (for example certain device configurations or co-location with another transmitter), then the IC authorization is no longer considered valid and the IC ID **cannot** be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate IC authorization.

When using Summit's IC grant for the SDC-PE15N, the integrator must include specific information in the user's guide for the device into which the SDC-PE15N is integrated. The integrator must not provide information to the end user regarding how to install or remove this RF module in the user's manual of the device into which the SDC-PE15N is integrated. In addition to the required FCC statements outlined above, the following IC statements must be added in their entirety and without modification into a prominent place in the user's guide for the device into which the SDC-PE15N is integrated:

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

The integrator must list out information for each antenna used with the host device into which the SDC-PE15N is integrated. The following examples are based on antennas with which the SDC-PE15N was certified and represent an acceptable format:

Summit SDC-CF22G Antenna

- **Form Factor:** Chip Antenna on PCB
- **Type:** Dipole
- **Maximum 2.4 GHz Gain:** 0 dBi

Cisco AIR-ANT 4941

- **Form Factor:** Whip

- **Type:** Dipole
- **Maximum 2.4 GHz Gain:** 2.2 dBi
- **Tested and Certified 2.4 GHz Transmit Power:** 90% of maximum setting (power must be reduced to 90%)

Radial Larson Dipole

- **Form Factor:** Whip
- **Type:** Dipole
- **Maximum 2.4 GHz Gain:** 1.6 dBi (not used during testing)
- **Maximum 5 GHz Gain:** 5 dBi

HUBER+SUHNER

- **Form Factor:** Whip
- **Type:** Monopole
- **Maximum 2.4 GHz Gain:** 3 dBi
- **Maximum 5 GHz Gain:** 6.5 dBi
- **Tested and Certified 2.4 GHz Transmit Power:** 95% of maximum setting (power must be reduced to 95%)
- **Tested and Certified 5 GHz Transmit Power:** 100% of maximum setting (no reduction of power is required in the 5 GHz band)

Labeling Requirements

The final end product must be labeled in a visible area with the following notice:

Contains IC ID: 6616A-SDCPE15N

European Union

User's Guide Requirements

The integrator must include specific information in the user's guide for the device into which the SDC-PE15N is integrated. In addition to the required FCC and IC statements outlined above, the following R&TTE statements must be added in their entirety and without modification into a prominent place in the user's guide for the device into which the SDC-PE15N is integrated:

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

- **EN60950-1:2001 A11:2004**
Safety of Information Technology Equipment
- **EN 300 328 V1.7.1: (2006-10)**





Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

- **EN 301 489-1 V1.6.1: (2005-09)**
Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
- **EN 301 489-17 V1.2.1 (2002-08)**
Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment
- **EN 301 893 V1.5.1 (2008-12)**
Electromagnetic compatibility and Radio spectrum Matters (ERM); Broadband Radio Access Networks (BRAN); Specific conditions for 5 GHz high performance RLAN equipment
- **EU 2002/95/EC (RoHS)**
Declaration of Compliance – EU Directive 2003/95/EC; Reduction of Hazardous Substances (RoHS)



This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

 Česky [Czech]	<i>[Jméno výrobce]</i> tímto prohlašuje, že tento <i>[typ zařízení]</i> je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
 Dansk [Danish]	Undertegnede <i>[fabrikantens navn]</i> erklærer herved, at følgende udstyr <i>[udstyrets typebetegnelse]</i> overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
 Deutsch [German]	Hiermit erklärt <i>[Name des Herstellers]</i> , dass sich das Gerät <i>[Gerätetyp]</i> in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
 Eesti [Estonian]	Käesolevaga kinnitab <i>[tootja nimi = name of manufacturer]</i> seadme <i>[seadme tüüp = type of equipment]</i> vastavust direktiivi 1999/5/EÜ põhinõuetele ja

	nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
[en] English	Hereby, <i>[name of manufacturer]</i> , declares that this <i>[type of equipment]</i> is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
[es] Español [Spanish]	Por medio de la presente <i>[nombre del fabricante]</i> declara que el <i>[clase de equipo]</i> cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
[el] Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ <i>[name of manufacturer]</i> ΔΗΛΩΝΕΙ ΟΤΙ <i>[type of equipment]</i> ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
[fr] Français [French]	Par la présente <i>[nom du fabricant]</i> déclare que l'appareil <i>[type d'appareil]</i> est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
[it] Italiano [Italian]	Con la presente <i>[nome del costruttore]</i> dichiara che questo <i>[tipo di apparecchio]</i> è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo <i>[name of manufacturer / izgatavotāja nosaukums]</i> deklarē, ka <i>[type of equipment / iekārtas tips]</i> atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo <i>[manufacturer name]</i> deklaruoja, kad šis <i>[equipment type]</i> atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
[nl] Nederlands [Dutch]	Hierbij verklaart <i>[naam van de fabrikant]</i> dat het toestel <i>[type van toestel]</i> in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
[mt] Malti [Maltese]	Hawnhekk, <i>[isem tal-manifattur]</i> , jiddikjara li dan <i>[il-mudel tal-prodott]</i> jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
[hu] Magyar [Hungarian]	Alulírott, <i>[gyártó neve]</i> nyilatkozom, hogy a <i>[... típus]</i> megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
[pl] Polski [Polish]	Niniejszym <i>[nazwa producenta]</i> oświadczam, że <i>[nazwa wyrobu]</i> jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
[pt] Português [Portuguese]	<i>[Nome do fabricante]</i> declara que este <i>[tipo de equipamento]</i> está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
[sl] Slovensko [Slovenian]	<i>[Ime proizvajalca]</i> izjavlja, da je ta <i>[tip opreme]</i> v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Slovensky [Slovak]	<i>[Meno výrobcu]</i> týmto vyhlasuje, že <i>[typ zariadenia]</i> spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
 Suomi [Finnish]	<i>[Valmistaja = manufacturer]</i> vakuuttaa täten että <i>[type of equipment = laitteen tyyppimerkintä]</i> tyypinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
 Svenska [Swedish]	Härmed intygar <i>[företag]</i> att denna <i>[utrustningstyp]</i> står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Labeling Requirements

The final end product must be labeled in a visible area with the following notice:

