PerSe™
by Semtech

PerSe Presentation

Agenda

- PerSe Introduction

- PerSe Product Families

- PerSe Key Selling Points

- Summary

PerSe™
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Technology that Makes More Sense

- Derived from, and a contraction of, *Person Sensing*

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Introducing ⓟ PerSe™

WHAT IS IT?	WHAT DOES IT DO?	WHAT ARE THE BENEFITS?
PerSe technology is for every personal connected consumer device.	PerSe intelligently senses human presence to enable smart responses in consumer devices, making Smart device smarter.	PerSe elevates user experience by optimizing RF performance and enhancing intuitive gesture control in wearables.

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Product Portfolio

<u>Per</u>son <u>Se</u>nsing technology – Intelligently detects human presence

PerSe Connect	**PerSe Connect Pro**	**PerSe Control**
SAR Sensor to optimize 5G/4G/Wi-Fi <u>Connect</u>ivity	PD Sensor to improve high band 5G mm <u>Connect</u>ivity	Wearable Sensor to enhance smarter <u>Control</u>
SX933x	**SX934x**	**SX921x**
SX932x		

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Key Selling Points

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PerSe™ Consumer Sensing Offerings

Smartphones

5G SAR Sensor for
Connectivity Optimization

Laptops/Tablets

Wi-Fi 6 SAR Sensor for
RF Improvement

Wearables
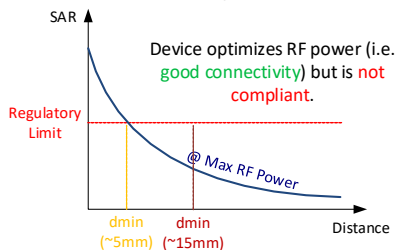
Wearable Sensor for
Gesture control

PerSe Technology is for every personal connected consumer device

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PerSe™ Consumer Sensing Benefits

Without User Proximity Detection

SAR

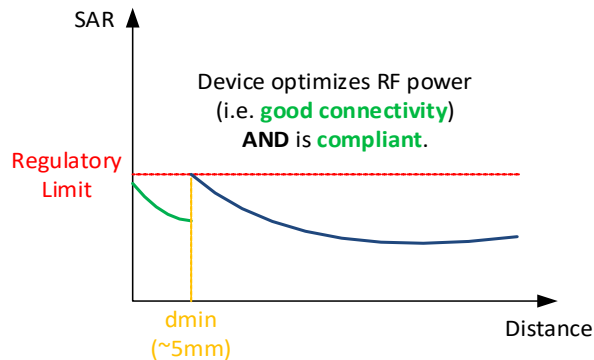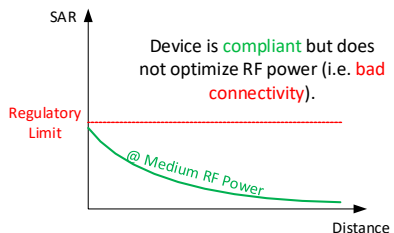Device optimizes RF power (i.e. good connectivity) but is not compliant.

Regulatory Limit

@ Max RF Power

dmin (~5mm)   dmin (~15mm)

Distance

COMPLIANCE ALERT

Permanent Power Reduction

SAR

Device is compliant but does not optimize RF power (i.e. bad connectivity).

Regulatory Limit

@ Medium RF Power

Distance

Performance ⚖ Compliance

Smart Human Sensing

SAR

Device optimizes RF power (i.e. **good connectivity**) **AND** is **compliant**.

Regulatory Limit

dmin (~5mm)

Distance

PerSe smart sensors intelligently senses human presence to enable smart responses

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PerSe™ Enhances Connectivity

- PerSe Smart sensor improves **connectivity** and **safety**

- Users experience enhanced performance and productivity

- Wi-Fi 6E is gaining acceptance, SAR sensors enable maximum throughput while guaranteeing safety compliance for work and infotainment

CONNECTIVITY

Wi-Fi 6E™

SAFETY

!

SAFETY FIRST

PerSe Smart sensor is human first and improves connectivity and safety

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PerSe™ Enhances Control

- Wear Detection - auto power on/off ,auto stop/resume, auto lock/unlock
- Gesture Control – tap, touch, swipe and scroll to enable smart assistant, noise cancelation, volume control and media playback functions.

PerSe Smart sensors elevates user experience by enhancing intuitive gesture control

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Smart Human Sensing

- Smart Engine can differentiate between human and objects such as table or protective cover

- Optimal RF control is achieved by enabling back off mode only when human is detected
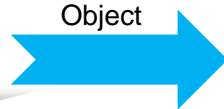
HUMAN SENSING

Human

Smart Engine

Object

OBJECT DETECTION

dBm

Back off Mode: **ON**

dBm

Back off Mode: **OFF**

Advantages & Summary

- PerSe elevates user experience by optimizing mobile connectivity and enhancing intuitive control in wearables

- Smart Sensors Market Leader

- Best-in-Class Product Performance

- Preferred Smart Sensor Provider

- World Class Stable Supply Chain

Thank you

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