



Lextar offers a wide variety of products at the light source transmitter and signal receiver for wearable applications, true wireless stereo (TWS), smart watch and AR glasses, which can be flexibly matched and selected by customers. Due to the needs of the IoT wearable devices to be light, thin and small, and easy to carry, Lextar has developed a system-in-package (SiP) PPG product to reduce the overall packaging area and introduce health sensors into the earphone market to provide more functions

Optical SiP Solution for True Wireless Stereo (TWS)

Features:

P-sensor

- Ultra small package size reduces the volume of the true wireless stereo (TWS)
- Quick frame time (Ims) leads to better performance and user experience
- In terms of an annual shipment of 290 million units, the reduced carbon emissions are equivalent to the carbon absorption of 12 trees in one year

PPG

- HRM & SpO2 sensor module include AFE IC
- Lextar provides 3LED+IPD+IIC in one small package technology
- The heart rate data is calculated and shown after approximately 10 seconds of measurement
- In terms of an annual shipment of 290 million units, the reduced carbon emissions are equivalent to the carbon absorption of 5,333 trees in one year



Product Series	Dimensions (mm)	Remark
PN21PT1.0	2.0 × 1.0 × 0.5	P-sensor for TWS
PNIIPTI.0	1.4 × 1.0 × 0.35	P-sensor for TWS
PN32K01	2.05 × 2.5 × 0.55	PPG + P-sensor for TWS

LED/PD for Smart Watch

Features:

- Various product options fully meet customer request High brightness LED and diverse wavelength LED
- High sensitivity PD saves 10% more energy comparing with competitors' products
- PD sensitivity range covers 400 -1,700 nm, and the sensing spectrum can be adjusted according to requirements
- In terms of an annual shipment of 128 million units, the reduced carbon emissions
- are equivalent to the carbon absorption of 2345 trees in one year Tx Rx



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Tx-PII6H0I	1.6 × 0.8 × 0.6	G	
Tx-PI22G0I	2.2 × 1.8 × 0.6	G	
Tx-PIIIH0I	1.85 × 1.65 × 0.6	G + R + IR	
Tx/Rx-PM53G01	$4.4 \times 3.7 \times 0.6$	Tx + Rx	
Tx-PI21ZLx	2.2 × 1.8 × 0.6	1,050 nm/ 1,350 nm/ 1,550 nm	
Rx-PP21ZN2	2.0 × 1.8 × 0.6	-	
Rx-PP32ZNI	$2.6 \times 3.2 \times 0.6$	-	
Rx-PP52ZN4	3.5 × 2.5 × 0.6	-	
Rx-PP52ZN2	4.8 × 2.5 × 0.6	-	
Rx-PP52ZN5	$3.2 \times 2.0 \times 0.6$	-	
Rx-PP21ZL1	2.2 × 1.8 × 0.6	900 – 1,700 nm	
LED/VCSEL for AR			

Dimensions (mm)

Remark

Product Series

Features:

Eye Tracking

- Red glow reduction to greatly improve user experience. In terms of an annual shipment of 9.9 million units, the reduced carbon
- emissions are equivalent to the carbon absorption of 73,273 trees in one year



Product Series	J7EF
Peak Wavelength (nm)	850
FOV (degree)	34 (120 inch at 5 m)

FHD 1,920 x 1,080

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Resolution