



Smart Sensing

◀ Smart Sensing-Transmitter ▶

With the rapid advancements in optical sensing technology, consumers can now manage their health more conveniently. Ennostar offers a comprehensive range of products—from full-spectrum chips, packages to modules that include both emitters and receivers. We have diversified design, customized design, and high-quality manufacturing capabilities, our solutions are the top choice for energy-efficient applications. Ennostar can meet the needs of leading brands in sensing and are trusted by our partners.

TOP
3

Top SWIR LED supplier for the **top three** TWS products in the world for technology application TWS

40 %

Heart rate and blood oxygen detection chips are integrated into many global brand smartwatches, **with a market share exceeding 40%**

The sensor components are adopted by **major global wearable brands**

TOP
1

Proximity sensor chips for cell phones **rank first** in global market share



Heart Rate



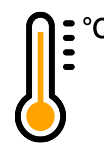
Blood Oxygen



Blood Glucose



Moisture



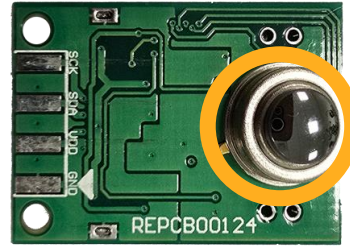
Body Temperature



Ambient Light

Temperature Sensing

R	C	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
01	25.69	25.90	26.25	25.14	26.64	25.75	24.10	24.20	24.55	24.31	25.06	24.71	24.86	24.60	25.28	25.47	
02	25.38	25.07	25.56	25.59	26.30	28.61	26.03	25.94	24.67	25.12	23.90	24.91	24.41	25.00	24.58	24.65	
03	25.84	26.10	25.15	24.99	27.43	29.29	29.74	26.45	25.92	25.69	24.50	24.47	24.83	24.98	25.49	22.57	
04	25.79	24.98	25.60	25.31	25.20	27.80	30.08	29.41	27.04	25.39	24.55	24.03	24.15	24.72	23.37	23.76	
05	25.00	25.74	24.23	25.23	25.70	28.19	30.45	30.01	29.70	27.38	25.19	24.37	25.73	23.84	24.05	24.39	
06	24.32	26.11	24.90	28.32	28.66	30.50	30.05	29.28	29.76	28.88	27.05	25.89	24.68	24.86	24.88	24.40	
07	26.05	25.27	29.61	30.22	31.03	31.35	31.46	30.67	30.27	29.31	29.46	27.82	28.87	29.30	27.11	22.58	
08	24.82	24.66	29.02	31.81	32.01	31.92	31.59	30.96	30.80	29.94	29.88	30.81	31.47	31.44	30.33	29.29	
09	25.82	26.61	30.26	31.40	31.28	31.32	31.84	31.71	30.39	30.38	30.40	30.32	31.01	30.85	31.08	31.25	
10	24.86	25.43	29.50	31.40	31.69	32.00	32.07	31.60	31.14	29.78	29.99	30.08	30.03	30.15	31.29	29.45	
11	25.37	26.98	27.06	30.60	30.86	31.35	31.27	31.49	30.80	29.55	30.18	30.19	29.97	29.71	28.64	28.94	
12	25.37	25.52	24.71	29.32	30.46	31.06	31.37	30.03	30.11	29.99	28.72	27.29	26.78	27.04	27.58	26.91	
13	24.44	26.00	25.60	26.18	30.18	29.43	29.68	28.26	28.13	27.36	26.76	26.32	26.84	27.08	26.27	27.00	
14	25.59	25.49	25.81	25.52	26.32	26.90	27.08	23.62	25.91	26.25	26.46	25.15	26.84	25.90	26.78	26.53	
15	24.75	25.81	24.86	25.73	26.08	25.84	24.80	26.16	26.09	24.52	26.00	26.30	27.54	26.01	26.37	27.10	
16	24.52	26.70	23.95	24.63	25.01	25.96	25.94	23.58	24.98	25.59	25.51	26.84	26.51	26.95	28.54	27.32	



Resolution	16x16
FOV(°)	72
Temperature Range (°C)	-20 ~ 150
Accuracy (°C)	±2°C
Frame Rate (fps)	1

Market Trends and Potential

- Non-contact measurement with thermopile array.
- MCU integrated for direct temperature data output.
- Flexible FOV development for various applications.

Technical Highlights

- Supports a wide operating temperature range from -20°C to 150°C.
- Delivers high measurement accuracy of up to ±2°C.

Sustainable Development Goals (SDGs)

