

# Specifications

These characteristics are valid under the following conditions:

- The J17 and sensor head must have been calibrated at an ambient temperature between +20° C and +30° C.
- The J17 and sensor head must be used in an environment within the limits described in Table 4-5, Warranted Environmental Characteristics.
- The J17 and sensor head must have had a warmup period of at least 10 minutes.

Optical measurements are referred to photometric, radiometric, and colorimetric standards traceable to NIST.

## Specifications

**Table 4-1: Warranted Electrical Characteristics**

Characteristic	Standard
Accuracy (Excluding sensor-head, including nonlinearity)	1% of reading $\pm$ 2 Counts

**Table 4-2: Warranted Sensor Ranges**

Sensor	Units	Max Reading	Min. Reading
J1803	fL	500,000	0.01
	cd/m <sup>2</sup> (Nits)	1,500,000	0.03
J1805	cd	100	0.00001
J1806	W/m <sup>2</sup> /sr	1000	0.001
J1811	fc	5000	0.001
	lux (lm/m <sup>2</sup> )	50,000	0.01
J1812	mW/m <sup>2</sup>	20,000	0.01
	W	2 mW	1 nW
J1820 (Y)	fL	100,000	0.1
	cd/m <sup>2</sup> (Nits)	300,000	0.3
J1820 u'v', xy		0.999	0.001
J1823	fL	10,000	0.1
	cd/m <sup>2</sup> (Nits)	30,000	0.3
J1823 Opt. 01	fL	10,000	1
	cd/m <sup>2</sup> (Nits)	30,000	3

Refer to sensor-head documentation for detailed specifications.

Table 4-3: Typical Electrical Characteristics

Characteristic	Standard
Power Requirements	
Alkaline battery IEC type 6LR61, NEDA type 1604	7 V to 10 V
External Power Supply	9 V to 12 VDC
Battery Life IEC 6LR61 battery with backlight off and RS-232 unplugged.	30 hours
Battery Low Indication	7.2 V

Table 4-4: Typical Mechanical Characteristics

Characteristic	Standard
Height (Without sensor.)	198 mm (7.8 inches)
Width	93 mm (3.7 inches)
Depth	34 mm (1.3 inches)
Shipping Weight (Includes battery, manual, and packaging.)	1.4 kg (3 lbs)



## Specifications

**Table 4-5: Warranted Environmental Characteristics**

<b>Characteristic</b>	<b>Standard</b>
Temperature	
Nonoperating	-55° C to +85° C
Operating	-15° C to +55° C
Humidity, operating and nonoperating	J17 Meets MIL Std 28800E Class 3 Refer to the Environmental Characteristics for each J1800 Series sensor head.
Electrostatic Immunity	Complies with IEC 801-2
Electromagnetic Compatibility	Meets CISPIR 22B, FCC Class A and VDE Class B