

HIGH POWER FIBER-COUPLED LED LIGHT SOURCES

Goptica FCS-series fiber-coupled LED light sources employ the latest high-power LED technologies and a proprietary coupling optics to achieve maximum optical output power. Optical output is coupled into a fiber through a standard SMA fiber adaptor port (SMA fiber patch cords are sold separately). FCS series also features a locking electrical connector for secured connection. FCS series are designed as a universal light source for general lab use and OEM applications. The one-piece machined housing features multiple mounting holes. All Goptica LED drivers such as the SLC series or other LED drivers and current sources can be used to drive the light sources.

FEATURES

- High-power UV/VIS/NIR/white fiber-coupled LEDs
- Interchangeable fiber with SMA connector
- No moving parts in optical path
- Multiple mounting features for lab and OEM applications
- Optional LED controllers
- Compact, machined metal housing with integrated heat sink
- Locking electrical connector

APPLICATIONS

- Microscopy
- Fluorescence
- Sensors
- Semiconductor equipment
- Testing instruments
- Medical instruments
- Machine vision

PERFORMANCE SPECIFICATIONS

Type A FCS | *passive cooling*



Part Number	Description	Nominal Wavelength (nm)	I_{op} (mA)	V_{op} (V)	Typical Radiant Flux ^{1,2} (mW) With 400 μ m 0.22NA Fiber	Typical Radiant Flux ² (mW) With 400 μ m 0.39NA Fiber
FCS-0000-000	Cool White	5,500K	1000	3.9	3.2	6.4
FCS-0001-000	Warm White	4,000K	1000	3.9	3.2	6.4
FCS-0002-000	Glacier White	6,500K	1000	3.6	3.2	6.4
FCS-0003-000	Warm White	3,000K	1000	2.8	2.8	5.6
FCS-0265-001	Deep UV	265	350	6.3	400 μ W	N/A
FCS-0275-001	Deep UV	275	600	6	700 μ W	N/A
FCS-0280-002	Deep UV	280	800	6.5	600 μ W	N/A
FCS-0310-001	Deep UV	310	600	5.8	360 μ W	N/A
FCS-0325-001	Deep UV	325	350	5.4	220 μ W	N/A
FCS-0340-002	Deep UV	340	350	4.3	0.6	1.1
FCS-0365-001	UV 365nm	365	1000	3.65	4.3	8.6

Type A FCS | *continued*

Part Number	Description	Nominal Wavelength (nm)	I _{op} (mA)	V _{op} (V)	Typical Radiant Flux ^{1,2} (mW) With 400µm 0.22NA Fiber	Typical Radiant Flux ² (mW) With 400µm 0.39NA Fiber
FCS-0380-000	UV 380nm	380	1000	3.2	2.8	5.6
FCS-0385-001	UV 385nm	385	1000	3.65	5.8	11.6
FCS-0395-000	UV 395nm	395	1000	3.1	6.2	12.4
FCS-400-002	UV 400nm, 3W	400	1000	3.1	6.1	12.2
FCS-0405-000	UV 405nm	405	1000	3	7.5	15
FCS-0410-000	410nm	410	1000	3	7.3	14.6
FCS-0415-000	415nm	415	1000	3	7.2	14.4
FCS-0430-000	430nm	430	500	3.8	2.9	5.8
FCS-0455-000	455nm	455	1000	3.0	18	36
FCS-0470-000	470nm	470	1000	3	7.2	14.4
FCS-0430-000	430nm	430	500	3.8	2.9	5.8
FCS-0455-000	455nm	455	1000	3.0	18	36
FCS-0470-000	470nm	470	1000	3.9	7	14
FCS-0471-000	471nm	471	350	3	2.1	4.2
FCS-0490-000	490nm	490	350	3.5	3.2	6.4
FCS-0505-000	505nm	505	1000	3.9	3.5	7
FCS-0530-000	530nm	530	1000	2.85	7	14
FCS-0560-000	560nm broadband	560	700	2.9	5.5	11
FCS-0590-000	590nm	590	1000	3.2	1.2	2.4
FCS-0617-001	617nm, 2W	617	700	2.3	6.5	13
FCS-0625-000	625nm	625	1000	3	6.5	13
FCS-0656-000	656nm	656	1000	3.1	6.5	13
FCS-0680-000	680nm	680	600	2.7	1.4	2.8
FCS-0700-000	700nm	700	500	2.1	0.6	1.2
FCS-0720-000	720nm	720	600	2.2	0.9	1.8
FCS-0740-000	740nm	740	1000	2.9	3.6	7.2
FCS-0780-000	NIR 780nm	780	800	2.5	2.2	4.4
FCS-0810-000	NIR 810nm	810	800	2.2	1.5	3
FCS-0850-001	NIR 850nm, 3W	850	1000	3	6	12
FCS-0870-000	NIR 870nm	870	700	1.9	1.4	2.8
FCS-0910-000	NIR 910nm	910	1000	1.9	1.5	3
FCS-0940-000	NIR 940nm	940	1000	2.4	4	8

¹ Due to variations in the manufacturing process and operating parameters such as temperature and current, the actual output of any given LED may vary. Specifications are intended to be used as a guideline.

Type B FCS | *fan cooling*



Part Number	Description	Nominal Wavelength (nm)	I_{op} (mA)	V_{op} (V)	Typical Radiant Flux ^{1,2,3} (mW) With 400 μ m 0.22NA Fiber	Typical Radiant Flux ^{2,3} (mW) With 400 μ m 0.39NA Fiber
FCS-0470-101	Blue	470	3000	4.6	19	38
FCS-0530-100	Green	530	2400	4.9	8	16
FCS-0540-100	Broadband Green	540	3000	4.6	10	20
FCS-0625-100	Red	625	2400	2.9	9	18

¹ Due to variations in the manufacturing process and operating parameters such as temperature and current, the actual output of any given LED may vary. Specifications are intended to be used as a guideline.

Type H FCS | *super high-power, fan cooling*



Part Number	Description	Nominal Wavelength (nm)	I_{op} (A)	V_{op} (V)	Typical Radiant Flux ^{1,2,3} (mW) With 1000 μ m 0.22NA Fiber	Typical Radiant Flux ^{2,3} (mW) With 1000 μ m 0.39NA Fiber
FCS-0365-201	UV	365	18	4.2	200	140
FCS-0405-201	UV	405	18	3.6	170	220
FCS-0415-200	Blue Violet 415nm, 65W	415	18	3.6	275	350
FCS-0470-200	Blue, 50W	470	13	3.8	180	280
FCS-0470-201	Blue, 60W	470	18	3.4	220	330
FCS-0470-202	Blue, 90W	470	27	3.4	260	390
FCS-0525-200	Green, 60W	525	13	4.6	100	160
FCS-0525-201	Green, 80W	525	18	4.4	120	190
FCS-0560-200	560 broadband, 70W	560	18	3.8	180	280
FCS-0625-200	Red, 38W	625	13	2.9	200	310
FCS-0625-201	Red, 42W	625	18	2.3	250	370
FCS-0730-200	NIR	730	18	5.9	110	170
FCS-0780-200	NIR	780	18	3.6	200	300
FCS-0850-200	NIR	850	18	3.75	220	340
FCS-6500-200	Glacier White, 30W	6500K	9	3.7	120	180
FCS-6500-201	Glacier White, 65W	6500K	18	3.7	190	280

¹ Due to variations in the manufacturing process and operating parameters such as temperature and current, the actual output of any given LED may vary. Specifications are intended to be used as a guideline.

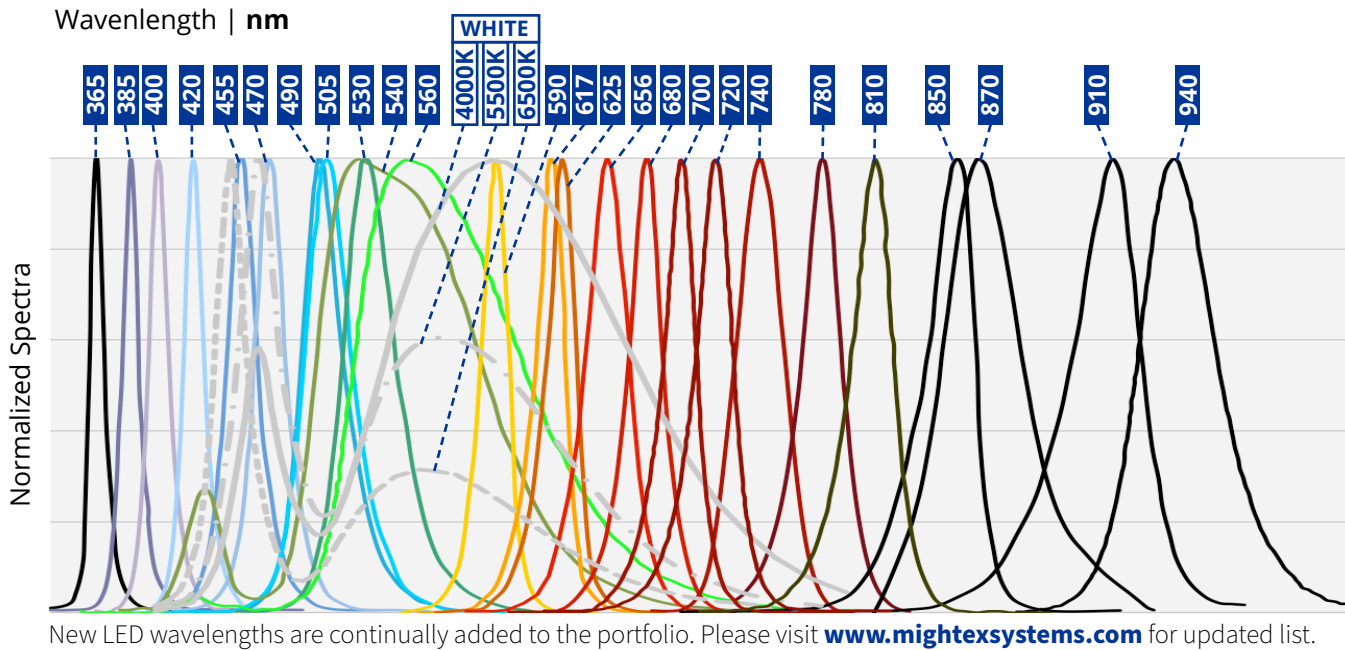
Discontinued Parts

Part Number	Description	Nominal Wavelength (nm)	I_{op} (mA)	V_{op} (V)	Typical Radiant Flux ^{1,2} (mW) With 400 μ m 0.22NA Fiber	Typical Radiant Flux ² (mW) With 400 μ m 0.39NA Fiber
FCS-0240-000	Deep UV	240	25	10	10 μ W	18 μ W
FCS-0255-000	Deep UV	255	30	6.5	45 μ W	80 μ W
FCS-0260-000	Deep UV	260	30	6.5	45 μ W	80 μ W
FCS-0265-000	Deep UV	265	350	6.3	100 μ W	N/A
FCS-0275-000	Deep UV	275	30	6.2	90 μ W	160 μ W
FCS-0280-000	Deep UV	280	30	5.8	90 μ W	160 μ W
FCS-0280-001	Deep UV	280	500	5.8	400 μ W	N/A
FCS-0285-000	Deep UV	285	30	5.8	90 μ W	160 μ W
FCS-0285-001	Deep UV	285	500	5.8	450 μ W	N/A
FCS-0295-000	Deep UV	295	30	5.5	75 μ W	135 μ W
FCS-0295-001	Deep UV	295	600	5.8	500 μ W	N/A
FCS-0300-000	Deep UV	300	500	6	300 μ W	N/A
FCS-0310-000	Deep UV	310	30	5.5	90 μ W	160 μ W
FCS-0325-000	Deep UV	325	30	5	60 μ W	110 μ W
FCS-0340-000	Deep UV	340	30	5	60 μ W	110 μ W
FCS-0340-001	Deep UV	340	500	4.3	0.6	1.1
FCS-0365-000	UV 365nm	365	500	3.8	5.8	11.6
FCS-0365-200	UV 365nm	365	12,000	4	60	180
FCS-0385-000	UV 385nm	385	500	3.8	5.8	11.6
FCS-0390-000	UV 390nm	390	1000	3.1	5.8	11.6
FCS-0400-000	UV 400nm, 1W	400	350	3.5	0.8	1.6
FCS-0400-001	UV 400nm, 4W	400	1000	4.1	3.5	7
FCS-0405-200	UV 405nm, 50W	405	13000	3.8	70	210
FCS-0420-000	420nm 2W	420	500	3.8	2.6	5.2
FCS-0420-000	420nm 3W	420	1000	3	7.2	14.4
FCS-0425-000	425nm	425	1000	3	6.7	13.4
FCS-0470-100	470nm	470	3000	4.6	11	21
FCS-0617-000	617nm, 3W	617	1000	3.9	6.5	13
FCS-0657-000	657nm	657	350	2.4	1	2
FCS-0850-000	850nm, 2W	850	1000	2.1	4	8

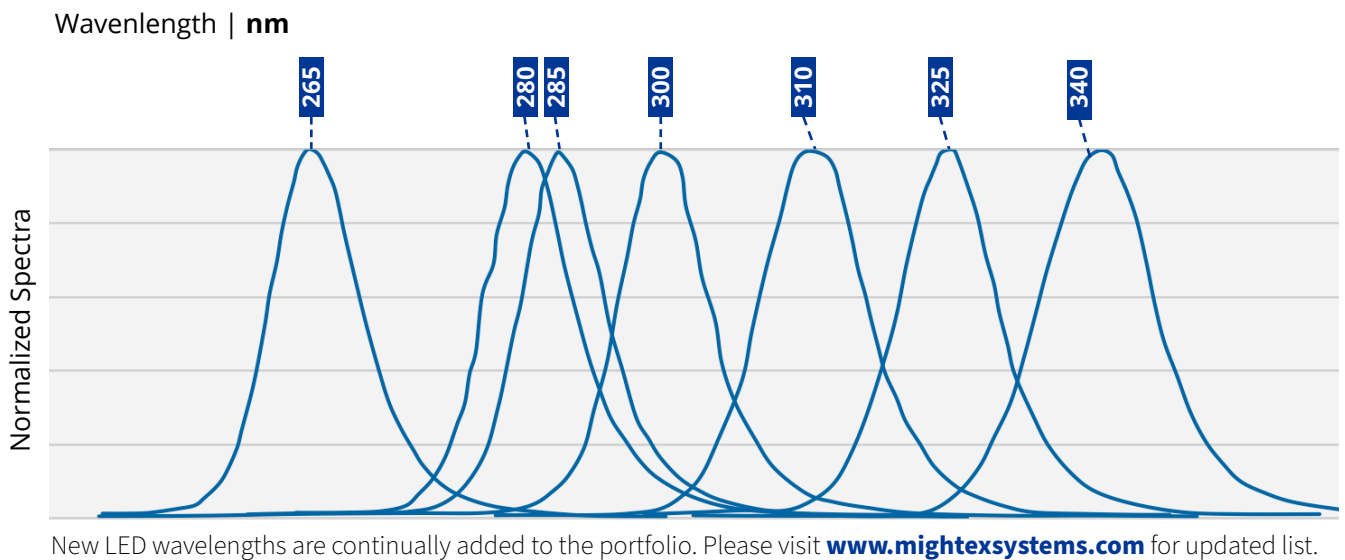
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LED SPECTRA

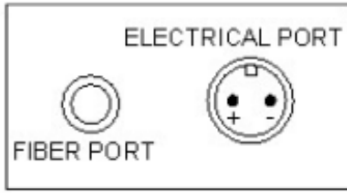
MIGHTEX LED WAVELENGTH PORTFOLIO



MIGHTEX DUV LED WAVELENGTH PORTFOLIO

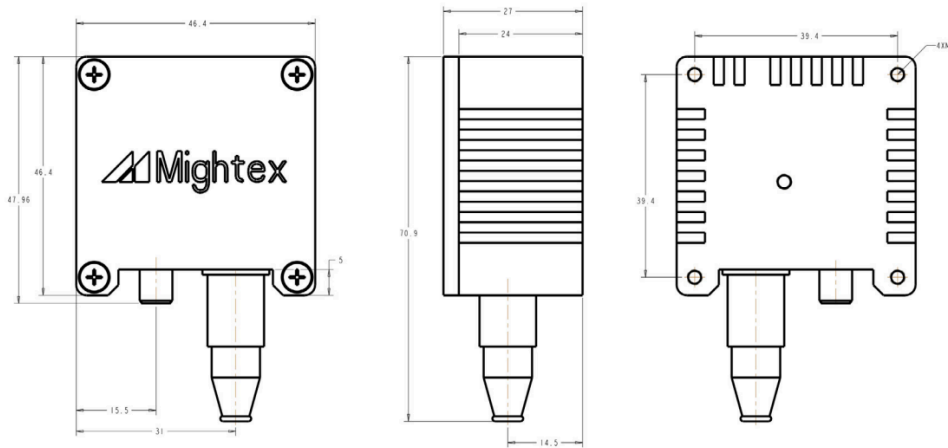


ELECTRICAL PIN LAYOUT

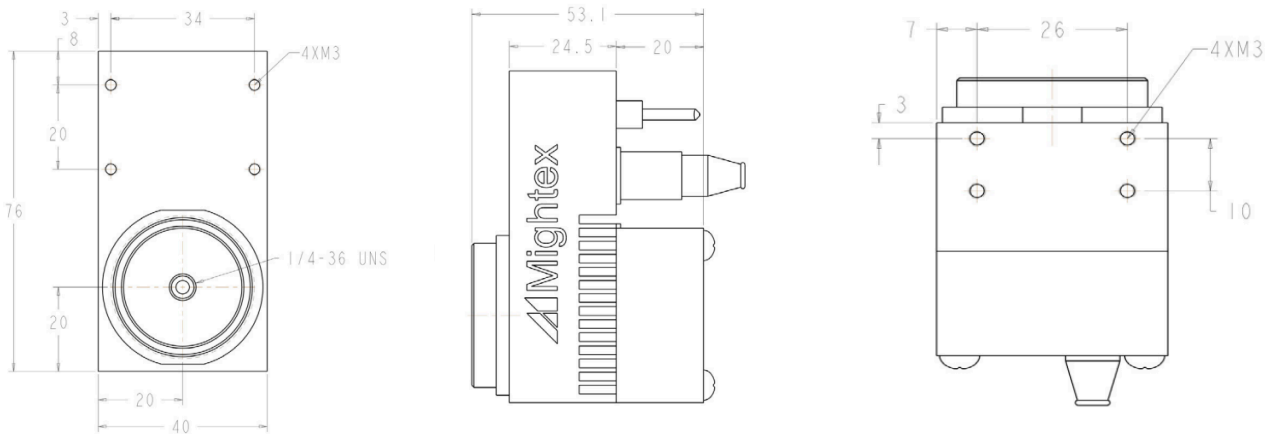


INSTALLATION DRAWINGS

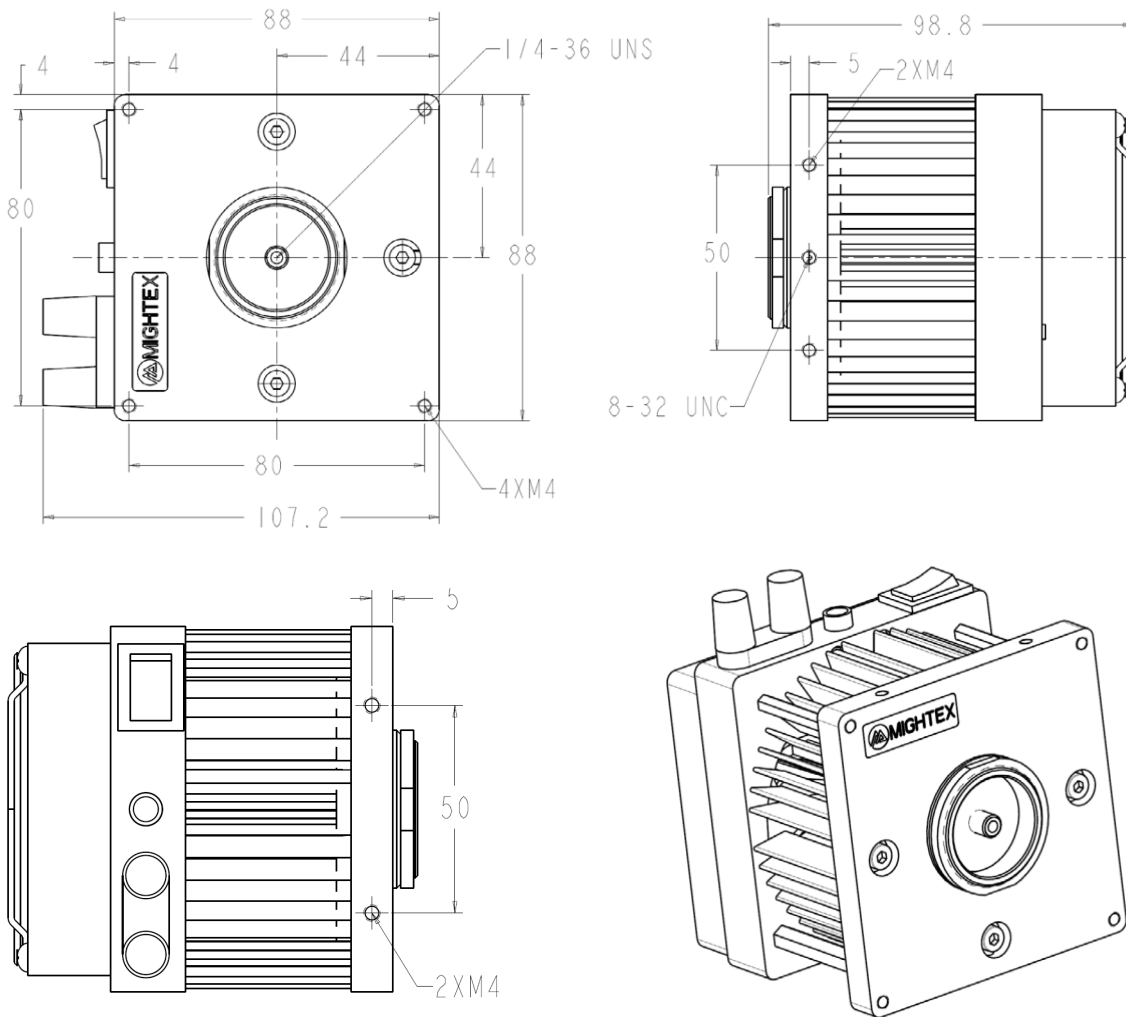
Installation Drawing for FCS Fiber-Coupled LED, Type-A



Installation Drawing for FCS Fiber-Coupled LED, Type-B



Installation Drawing for FCS Fiber-Coupled LED, Type-H



PART NUMBER AND ORDERING INFORMATION

FCS -

 - **XXX**
 Wavelength Configuration
 Code

For example, FCS-0470-000 is a 470nm fiber-coupled light source with SMA fiber adaptor.

With a world-class OEM design team, Goptica offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call [+86 150-0085-3620](tel:+8615000853620) or email sales@goptica.com for details.

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