

DSB-40-B



DEVICE 40 channel DWDM Source Bank

OVERVIEW The DWDM Source bank is a 40 channel DSB system that produces 40 ITU channels with 40 DFB laser sources, split among five Optilab, touchscreen benchtop units. The wavelength and output power for each channel is tuned through use of the touchscreens or through a Z-link wireless controller and LabVIEW software.

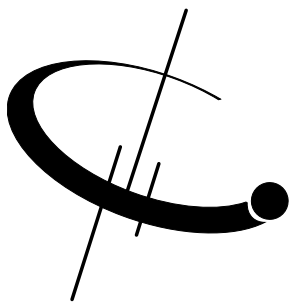
- FEATURES**
- 40 ITU channels
 - Adjustable wavelength and Current
 - Output can be customized to PM Panda Fiber Connector
 - Wavelength tuning range of $\pm 1\text{nm}$
 - Easy-to-use Touchscreen
 - Powerful LabVIEW Software for remote control and monitoring (Optional)

- SOFTWARE**
- 7" LCD Touchscreen
 - Built-in Intuitive GUI
 - Remote Control via Z-link (Optional)

- APPLICATIONS**
- Laboratory Testing and Measurement
 - DWDM Networks
 - Seed Laser
 - Fiber Optics Components
 - Fiber Sensors

- CUSTOMIZATION**
- PM or SM outputs available
 - Various power levels (5 mW, 10 mW, 20 mW)
 - A large selection of ITU channels (can specify number of each)
 - See next page for ordering instructions





DSB-40-B

SPECIFICATIONS

Wavelength	40 ITU Channels between Ch. 18 and 61 on 100 GHz Grid
Channel Spacing	100 GHz
Output Power	5 mW, 10 mW, 20 mW
Standard Laser Linewidth	2 MHz typ., 10 MHz max
Side Mode Suppression Ratio	45 dB typ.
Relative Intensity Noise	-145 dB/Hz max
Output Power Stability	±0.05 dB
Fiber Type	SMF-28
Optical Connector	FC/APC

OPTICAL

MECHANICAL

Operating Temperature	10 °C to +40 °C
Storage Temperature	-10 °C to +70 °C
Operating Humidity	0% to 85% Relative Humidity
Dimensions (LxWxH)	484mm x 393 mm x 151 mm (each sub-unit)
Weight	< 2.5 kg

ELECTRICAL

Power Supply	100-240V AC power
Display	7" LCD Touchscreen
Software	GUI Interface (Optional)

ORDER OPTIONS

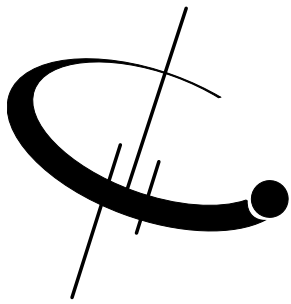
DSB-xx-B-yy-zz

xx: specifies number of channels
ie. 5, 10, 40, 80...

yy: specifies channel output power (mW)
ie. 5, 10, 20...

zz: specifies PM or SM
PM for PM, none for SM



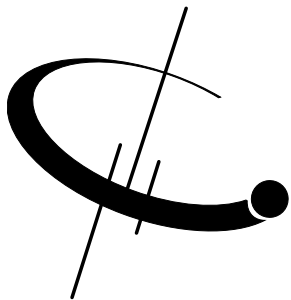


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ITU 100 GHz
Channels

Channel (#)	Wavelength (nm)	Frequency (GHz)		Channel (#)	Wavelength (nm)	Frequency (GHz)
1	1577.03	190100		37	1547.72	193700
2	1576.2	190200		38	1546.92	193800
3	1575.37	190300		39	1546.12	193900
4	1574.54	190400		40	1545.32	194000
5	1573.71	190500		41	1544.53	194100
6	1572.89	190600		42	1543.73	194200
7	1572.06	190700		43	1542.94	194300
8	1571.24	190800		44	1542.14	194400
9	1570.42	190900		45	1541.35	194500
10	1569.59	191000		46	1540.56	194600
11	1568.11	191100		47	1539.77	194700
12	1567.95	191200		48	1538.98	194800
13	1567.13	191300		49	1538.19	194900
14	1566.31	191400		50	1537.4	195000
15	1565.5	191500		51	1536.61	195100
16	1564.68	191600		52	1535.82	195200
17	1563.86	191700		53	1535.04	195300
18	1563.05	191800		54	1534.25	195400
19	1562.23	191900		55	1533.47	195500
20	1561.42	192000		56	1532.68	195600
21	1560.61	192100		57	1531.9	195700
22	1559.79	192200		58	1531.12	195800
23	1558.98	192300		59	1530.33	195900
24	1558.17	192400		60	1529.55	196000
25	1557.36	192500		61	1528.77	196100
26	1556.56	192600		62	1527.99	196200
27	1555.75	192700		63	1527.22	196300
28	1554.94	192800		64	1526.44	196400
29	1554.13	192900		65	1525.66	196500
30	1553.33	193000		66	1524.89	196600
31	1552.52	193100		67	1524.11	196700
32	1551.72	193200		68	1523.34	196800
33	1550.92	193300		69	1522.56	196900
34	1550.12	193400		70	1521.79	197000
35	1549.32	193500		71	1521.02	197100
36	1548.52	193600		72	1520.25	197200

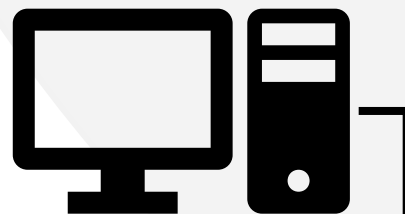




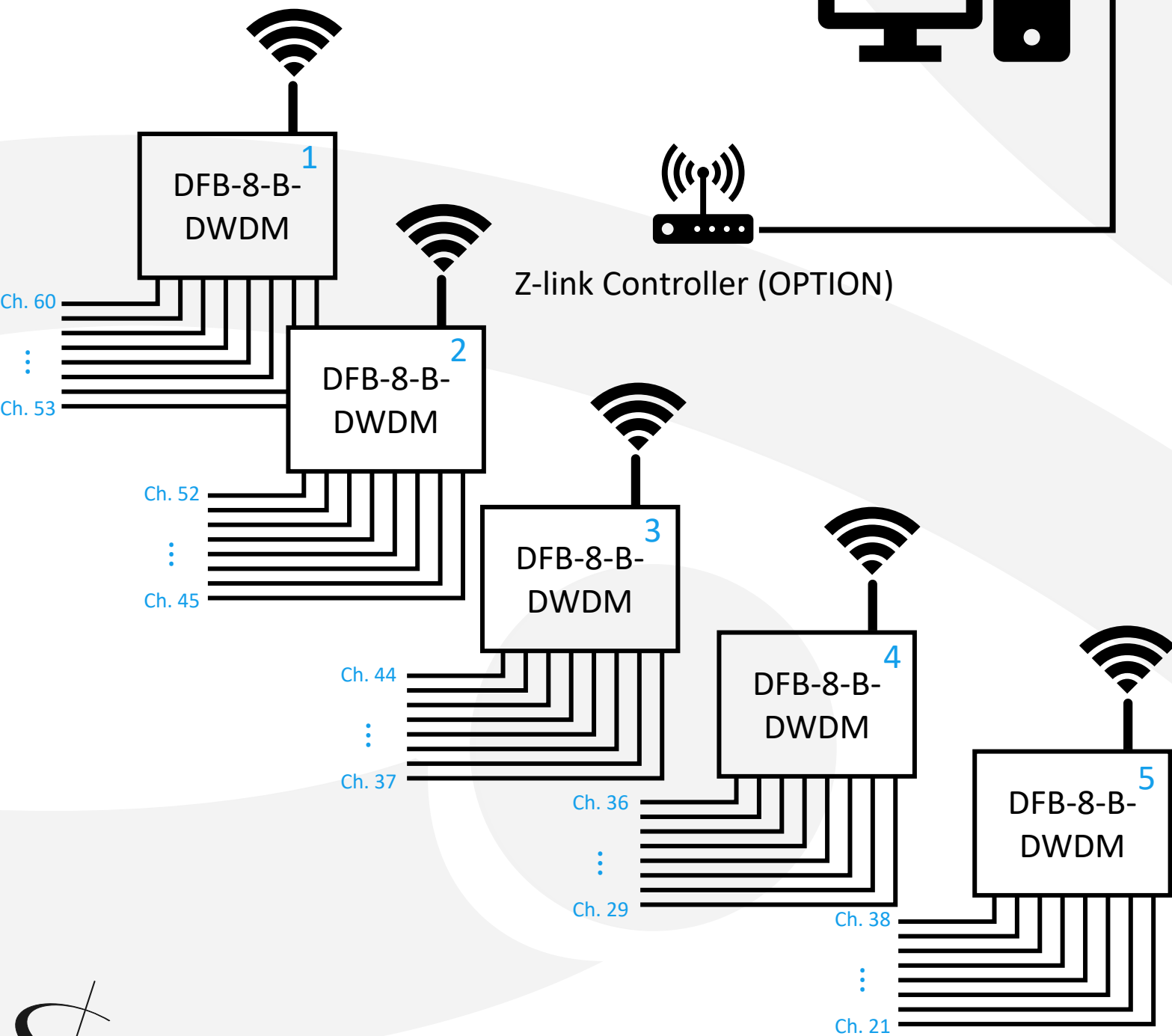
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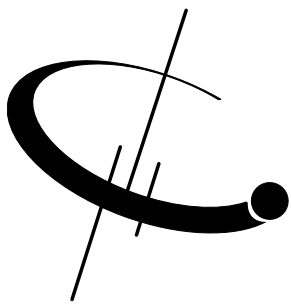
FUNCTION
DIAGRAM

PC (not included)



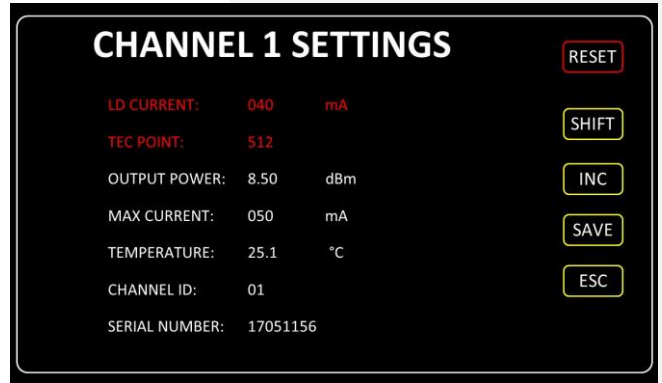
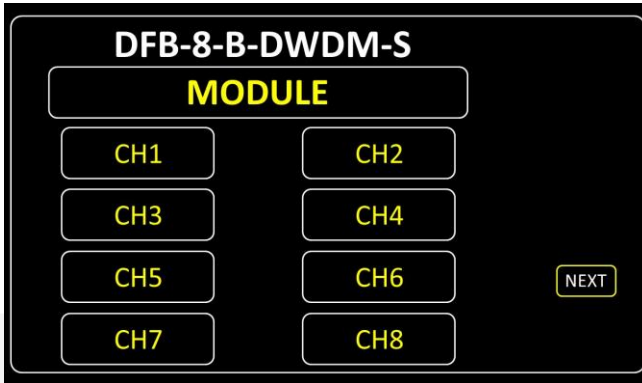
Z-link Controller (OPTION)





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Touchscreen



Wireless LabVIEW

SOFTWARE INTERFACES

