



**SOLiD**

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Simple | Easy | Flexible | SOLiD

# **SOLiD INFINITY ACCESS™ iMUX / iMUX+**

## **SOLiD Tunable Passive DWDM for Optical Access**

INFINITY ACCESS™ unlocks network capacity within an existing fiber plant to achieve economies of scale, reducing CAPEX and OPEX by creating simple and efficient optical access networks.

iMUX / iMUX+ unlocks network capacity within an existing fiber plant to achieve economies of scale, reducing capital expenditures and lowering operational expenditures by creating simple, integrated and future-proof optical access networks.

#### Optical Transport Solution

The efficient use of fiber optic assets is the foundation of a 5G world. The data transmission capacity demanded by 5G networks increases as new bands and larger channel bandwidths enable massive wireless data. Providing the necessary bandwidth to the edge cannot happen without fiber-optic infrastructure.

SOLID ONE FIBER solutions' compact design, which complies with NEBS and ETSI, ensures that legacy and new optical transport networks operate at 100% capacity and deliver their full bandwidth potential.

SOLID patented tunable self-tuning transceivers along with optimally designed MUX/DEMUX and coordinated filters offer the cost effective DWDM solution for optical access when operators suffer from fiber shortage. It supports point-to-multipoint and liner network topology.

INFINITY ACCESS™ also provides semi passive option called iMUX+, which enables to switch the WDM line into standby fiber when the working line is cut.

# SOLiD INFINITY ACCESS™ iMUX / iMUX+

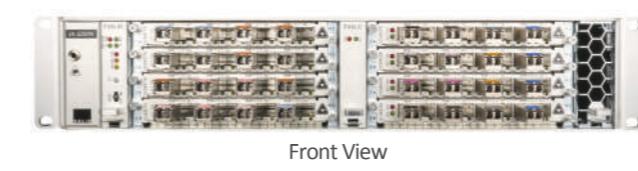
## iMUX Passive in Head End (HE)



### Functions & Features

- LGX form factors
- 3 band (1531nm, 1551nm and 1351nm) combining filter
- 14 slots 3U Indoor LGX shelf
- Three types of AWG modules
  - 50 GHz channel spacing compliant with ITU-T G.694.1
  - 16 TX/RX Ports for 1531 nm, 1551 nm and 1351 nm

## iMUX+ Active in Head End (HE) IA-3200N



Front View



Rear View

### Functions & Features

- 19 inch 2RU height providing total 8 slots for units
- Active units for WDM line protection and channels' power monitoring
  - Line Switch Unit for protection in point-to-point topology
  - Optical channel monitoring units for measuring the transmitting and receiving power level
- Main Control Unit (MCU) for EMS
- Power: -48VDC 1+1 redundancy / Operating Temperature: -5 °C – +50 °C (Ambient)

## iMUX Passive in Tail End (TE) Indoor Unit



### Functions & Features

- LGX form factors
- Industrial temperature grade
- Six types of AWG modules
- 50 GHz channel spacing compliant with ITU-T G.694.1
- 8 TX/RX Ports for low and high band of 1531 nm, 1551 nm and 1351 nm
  - 6 band (1531 nm low & high, 1551 nm low & high and 1351 nm low & high) combining filter
- Six types of Add/Drop filter

## iMUX Passive in Tail End (TE) Outdoor Unit



### Functions & Features

- Wide range wavelength operation
- 8 TX/RX Add/Drop for linear (cascade) topology
- Two different types of shelf for RN passive modules
  - Indoor 1U 3 slots LGX shelf
  - Outdoor enclosure accommodating 2 RN modules, IP53 rating

## SOLiD WDM Solution Architecture

### Passive WDM: iMUX with 8 λ tunable optic

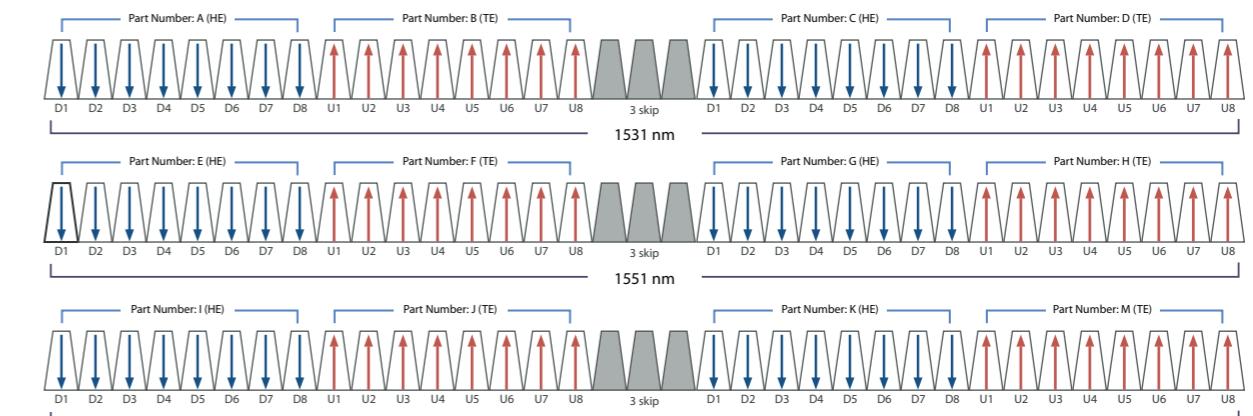


### Semi-Active WDM type II: iMUX+ with 8 λ tunable optic



- Active unit in head-end for WDM line protection
  - Active unit in head-end for channel monitoring
  - All passive in remote node
- 8 self-tuning 10G/25G transceivers
  - Allow to transmit total 96 λ's over single Fiber
  - Best balance investment in respect to CAPEX and OPEX

## iMUX OPTIMUM Tunable Optics



### Functions & Features

- 10Gbps or 25Gbps data rate
- DWDM grid compliant with ITU-T G.694.1
- 8 wavelengths tunable transceiver in step of 50GHz channel spacing
- Fully self-tuning operation
- Wavelength locking by patented software based technology
- Remote Diagnostics by Auxiliary Management Control Channel (AMCC)
- MSA compliant SFP+ and SFP28 form factor
- Duplex LC connector

# SOLiD INFINITY ACCESS™ iMUX / iMUX+

## iMUX OPTIMUM Wavelength Table

SKU #	1531		SKU #	1551		SKU #	1351	
	THz	nm		THz	nm		THz	nm
A	196.05	1529.163	E	193.75	1547.321	I	223.23	1343.006
	196.00	1529.553		193.70	1547.721		223.16	1343.382
	195.95	1529.944		193.65	1548.115		223.10	1343.758
	195.90	1530.334		193.60	1548.515		223.04	1344.135
	195.85	1530.725		193.55	1548.915		222.98	1344.512
	195.80	1531.116		193.50	1549.315		222.91	1344.889
	195.75	1531.507		193.45	1549.715		222.85	1345.266
	195.70	1531.898		193.40	1550.116		222.79	1345.643
	195.65	1532.290	F	193.35	1550.516	J	222.66	1346.399
B	195.60	1532.681		193.30	1550.918		222.60	1346.777
	195.55	1533.073		193.25	1551.319		222.54	1347.155
	195.50	1533.465		193.20	1551.721		222.48	1347.533
	195.45	1533.858		193.15	1552.122		222.41	1347.912
	195.40	1534.250		193.10	1552.524		222.35	1348.291
	195.35	1534.643		193.05	1552.926		222.29	1348.670
	195.30	1535.036		193.00	1553.329		222.23	1349.049
C	195.10	1536.609	G	192.80	1554.940	K	221.98	1350.569
	195.05	1537.003		192.75	1555.343		221.91	1350.949
	195.00	1537.397		192.70	1555.747		221.85	1351.330
	194.95	1537.792		192.65	1556.151		221.79	1351.710
	194.90	1538.186		192.60	1556.555		221.73	1352.091
	194.85	1538.581		192.55	1556.959		221.66	1352.473
	194.80	1538.976		192.50	1557.363		221.60	1352.854
	194.75	1539.371		192.45	1557.768		221.54	1353.236
D	194.70	1539.766	H	192.40	1558.173	M	221.41	1354.000
	194.65	1540.162		192.35	1558.578		221.35	1354.382
	194.60	1540.557		192.30	1558.983		221.29	1354.765
	194.55	1540.953		192.25	1559.389		221.23	1355.147
	194.50	1541.349		192.20	1559.794		221.16	1355.530
	194.45	1541.746		192.15	1560.200		221.10	1355.913
	194.40	1542.142		192.10	1560.606		221.04	1356.297
	194.35	1542.539		192.05	1561.013		220.98	1356.680

### Connect with SOLiD

SOLID helps people stay connected and safe in a rapidly changing world through a portfolio of the digital DAS for the various venues. SOLID enables indoor and outdoor cellular and public-safety communications at some of the world's best-known and most challenging venues including leading hospitals; professional and college sports venues; government, university and Fortune corporate buildings and campuses; international airports and metropolitan subways.

For more information or complete technical specifications, please visit our website or contact us via email or phone.

[solid.com](http://solid.com)

DEC 2022



Unit 2, Weighbridge Row,  
Cardiff Road  
Reading RG1 8LX, UK  
[solid.com](http://solid.com)  
[optical.support@solid.co.kr](mailto:optical.support@solid.co.kr)

TL9000  
H,V R4.0/R4.0

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