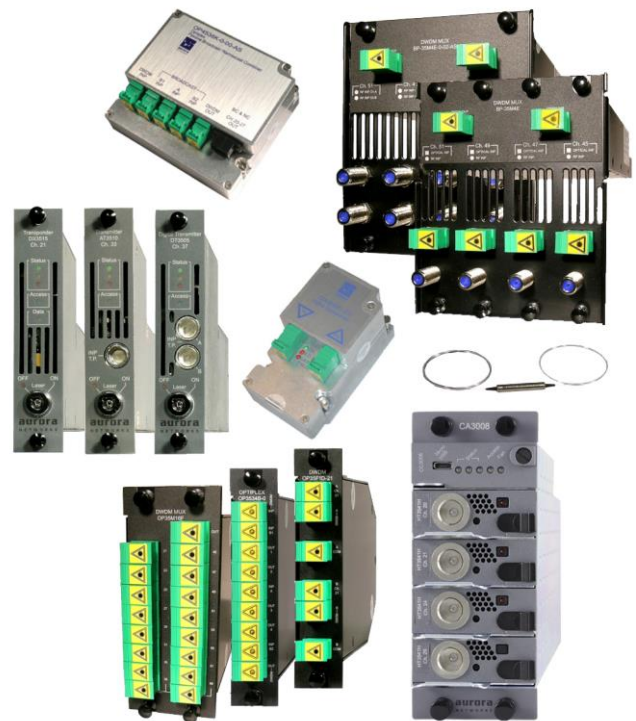


HFC/RFoG

ITU DWDM Channel Plan

FEATURES

- 40 different channels on the standard DWDM ITU Grid (ITU-T G.694.1, 100 GHz spacing)
- Convenient logical channel groupings ease network design
- Multi-channel (mux and demux) products available in 4-, 8- and 16-channel configurations
- Products designed to enable cascading of DWDM signals from module to module



PRODUCT OVERVIEW

ARRIS provides a wide variety of products for installation in 3RU chassis, in optical nodes, and in other field environments that support DWDM network architectures, including narrowcast transmitters and transponders, passive mux and demux modules and our unique OP3524 and OP3534 series of Narrowcast Demultiplexers with Broadcast/Narrowcast Combiners.

All of ARRIS DWDM products support an extended range of channels on the standard DWDM ITU Grid (ITU-T G.694.1, with 100 GHz channel spacing), from ITU Channel 20 to Channel 59, to provide both capacity for up to 40 channels and flexibility for network designs, while some products also support functions for ITU Channels 16 through 19.

For multi-channel products, ARRIS has defined a convenient set of logical channel “groupings” used for identification and product packaging. Most of these types of products have model numbers that include a channel group identifier (using the letters “J” through “U”) based on a sequential partitioning of the set of ITU channels into 10 groups of four channels each. This schema is detailed on the reverse side.

In the case of passive mux and demux modules, models are also available which further aggregate these groups into sets of 8 or 16 channels in a single package.

SPECIFICATIONS
ARRIS ITU Grid Channel Plan Groups

Schema and Specifications			Usage Guidelines			
DWDM ITU Grid (200 GHz spacing, odd channels only)		λ (nm)	Frequency (THz)	DWDM ITU Grid (100 GHz spacing)		
Channel Group Designator	ITU Channel			ITU Channel	Channel Group Designator	
A	-	1567.95	191.2	12	G	
	13	1567.13	191.3	13		
	-	1566.31	191.4	14		
	15	1565.50	191.5	15		
	-	1564.68	191.6	16		
	17	1563.86	191.7	17		H
	-	1563.05	191.8	18		
19	1562.23	191.9	19			
B	-	1561.42	192.0	20	J	
	21	1560.61	192.1	21		
	-	1559.79	192.2	22		
	23	1558.98	192.3	23		
	-	1558.17	192.4	24		
	25	1557.36	192.5	25		K
	-	1556.55	192.6	26		
C	-	1555.75	192.7	27	L	
	29	1554.94	192.8	28		
	-	1554.13	192.9	29		
	31	1553.33	193.0	30		
	-	1552.52	193.1	31		
	33	1551.72	193.2	32		M
	-	1550.92	193.3	33		
35	1550.12	193.4	34			
D	-	1549.32	193.5	35	N	
	37	1548.51	193.6	36		
	-	1547.72	193.7	37		
	39	1546.92	193.8	38		
	-	1546.12	193.9	39		
	41	1545.32	194.0	40		P
	-	1544.53	194.1	41		
43	1543.73	194.2	42			
E	-	1542.94	194.3	43	R	
	45	1542.14	194.4	44		
	-	1541.35	194.5	45		
	47	1540.56	194.6	46		
	-	1539.77	194.7	47		
	49	1538.98	194.8	48		S
	-	1538.19	194.9	49		
51	1537.40	195.0	50			
F	-	1536.61	195.1	51	T	
	53	1535.82	195.2	52		
	-	1535.04	195.3	53		
	55	1534.25	195.4	54		
	-	1533.47	195.5	55		
	57	1532.68	195.6	56		U
	-	1531.90	195.7	57		
59	1531.12	195.8	58			
		1530.33	195.9	59		

All wavelenghts measured in vacuum

To achieve the high packaging density of our modules for DWDM narrowcast applications, many of ARRIS's products are offered in modules that support 4, 8 or 16 ITU grid channels in a single device. In these cases, a part of the model number of the device designates an appropriate channel "group" according to the schema shown here.

The number of channels supported by each device type is also embedded within the model numbers (as noted on individual product data sheets).

For modules supporting four channels, the channel group designation is straightforward. For modules supporting either 8 or 16 channels, the associated channel group designator specifies the upper range of channel groups (and their channels) supported by the device. A few examples, all based on the OP35Mxy series of Optical Multiplexers (where x encodes the number of channels and y encodes the channel group) are provided here to clarify this model numbering:

- The OP35M4K is a 4-channel mux for all channels from 24 through 27 (on the 100 GHz-spaced ITU grid).
- The OP35M8L is an 8-channel mux for all channels from 24 through 31 (on the 100 GHz-spaced grid).
- The OP35M16T is a 16-channel mux for all channels from 40 through 55 (on the 100 GHz-spaced grid).
- Please refer to individual product data sheets for available channel groups for each device type

Channel group designators for a DWDM ITU Grid with 200 GHz spacing are used on older products. Channel group designators "A", "G" and "H" (for ITU channels 12 through 19) are also shown for reference purposes only. Please contact us directly if you have particular interest in either 200 GHz-spaced products or applications requiring use of these lower ITU channel numbers.

Note: When ordering individual modules, please note, for network planning purposes, that AT3550 "BC" series broadcast transmitters operate at 1545.3 nm ± 0.9 nm, occupying the approximate region of DWDM ITU Grid channels 39 through 41; as a result no channel within ARRIS's ITU Channel Plan Groups D, N or P (channels 36 through 43) should be used as a narrowcast channel when using these transmitters. Similarly, AT3550 "BA" series broadcast transmitters operate at 1563.0 ± 0.9 nm, occupying the approximate region of DWDM ITU Grid channels 17 through 19; as a result no channel within ARRIS's Groups A, G or H (channels 12 through 19) should be used as a narrowcast channel when using these transmitters.

Note: Specifications are subject to change without notice.

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