



Cellium

INDOOR WIRELESS DONE RIGHT

# CATx Cables – How Can They Serve You?

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# CATx Utilization: Ethernet vs. IF (Intermediate Frequency)

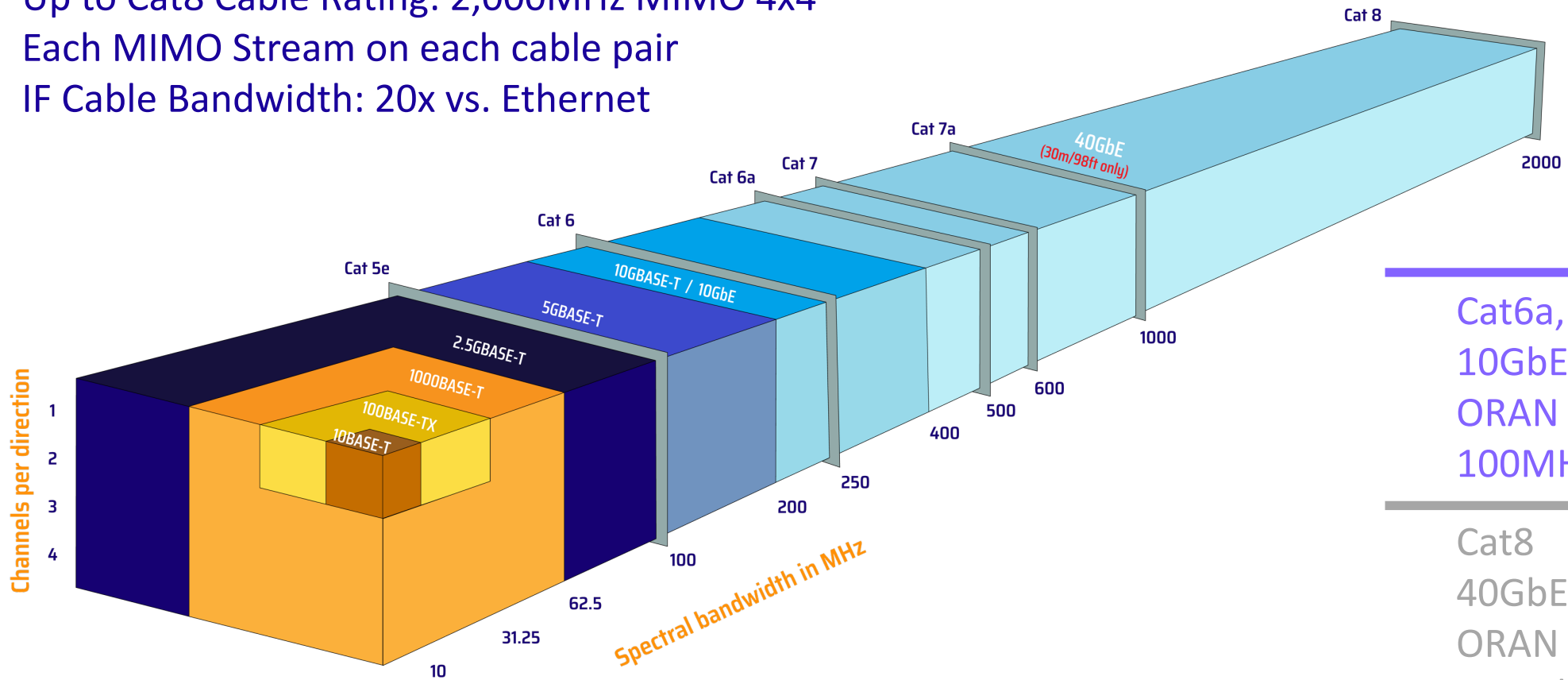
CatX (100m/328ft) is ideal for “horizontal” indoor deployments

IF over CatX: High cable frequency utilization

Up to Cat8 Cable Rating: 2,000MHz MIMO 4x4

Each MIMO Stream on each cable pair

IF Cable Bandwidth: 20x vs. Ethernet



Cat6a, 7, 7a, 8...  
10GbE (100m/328ft)  
ORAN 7.2 Split  
100MHz MIMO 4x4

Cat8  
40GbE (30m/98ft only)  
ORAN 7.2 Split  
400MHz MIMO 4x4

# IF Bandwidth and MIMO Support over CatX Cables

Up to 3x the Bandwidth Compared to Other Solutions

Cable Category	Cat 5e	Cat 6a	Cat 7	Cat 7a	Cat 8
Speed (ETH)	1G	10G	10G	10G	10G 25G/40G
Distance	100m/328ft	100m/328ft	100m/328ft	100m/328ft	100m/328ft 30m/98ft
Frequency Rating Analog Domain	100MHz	500MHz	600MHz	1,000MHz	2,000MHz
IF Bandwidth/MIMO	<125MHz 4x4	300MHz 4x4	360MHz 4x4	600MHz 4x4	1,200MHz 4x4
ORAN/eCPRI Bandwidth/MIMO	-	100MHz 4x4	100MHz 4x4	100MHz 4x4	100MHz 4x4 400MHz 4x4
					100m/328ft 30m/98ft