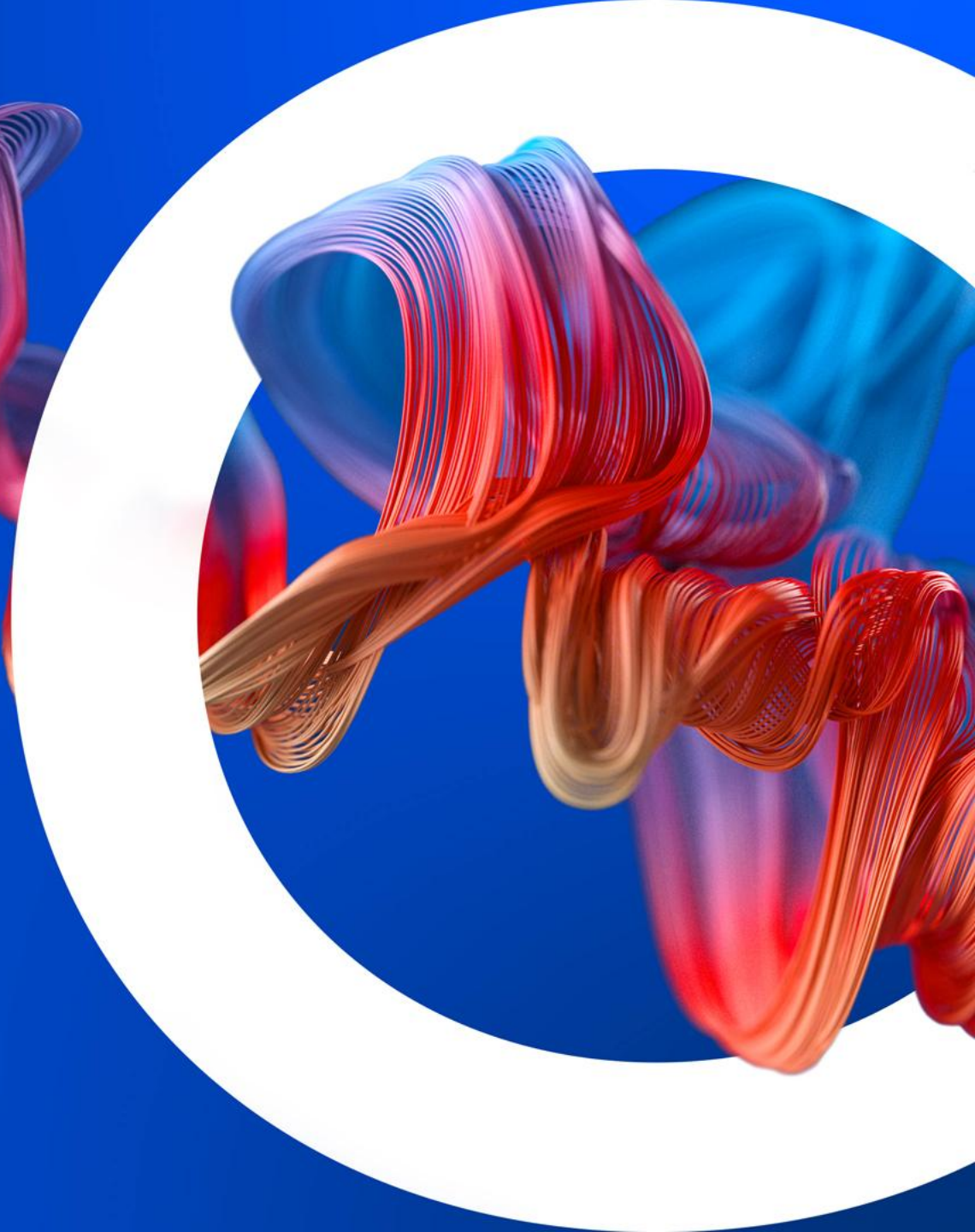


NOKIA

Nokia + Winncom



# Why Nokia ?

1. End-to-End solutions from Nokia, a global market leader in PON and IP – Network in a Box solutions for any size network
2. Trusted partnership with Winncom for anything Fiber or over the air ways
3. Comprehensive OLT and ONT portfolio designed for any deployment
4. GPON, XGS, 25Gb PON available today. 50Gb and 100Gb PON in the near future.
5. Open based standards across the products including ITU, IEEE, IETF, BBF, 3GPP, TM Forum and many others
6. In-House silicon chip design. Quillion for PON, Forwarding Processor for IP, PSE for optical, Reefshark for mobile



# Lightspan DF/SF series vs DZSI v1-08xc/16xc

## Nokia DF-16GM



- 16p GPON or 8p XGS/Multi-PON or 4p 25G PON
- Network connectivity 1x100GE (QSFP28) & 4x10GE (SFP+)
- 1U box, for indoor or outdoor (Hardened), AC or DC powered

## Nokia DF-32GM



- 32p GPON or 16p XGS/Multi-PON or 8p 25G PON
- Network connectivity 4x100GE (QSFP28) & 2x10GE (SFP+)
- 1U box, for indoor or outdoor, AC or DC powered

## Nokia SF-8M



- 8p GPON or 8p XGS/Multi-PON or 4p 25G PON
- Network connectivity 8x 10/25 Gb/s or 2x100Gb/s
- Clamshell package, passive cooling
- Triple Powered

## DZSI v1-08xc



- 8p XGS/GPON Combo PON
- Network connectivity 4x25GE/10GE (SFP28/SFP+)
- 1U box, for indoor or outdoor (Hardened), AC or DC powered

## DZSI MXK-F108



- 8p GPON Combo PON
- Network connectivity 4x10GE (SFP+)
- 1U box, for indoor or outdoor (Hardened), AC or DC powered

## DZSI v1-16xc



- 16p XGS/GPON Combo PON
- Network Connectivity 2x100GE (QSFP28) & 4x25GE (SFP28)
- 1U box, for indoor or outdoor (Hardened), AC or DC powered

# Lightspan MF-2 vs DZSI v2

Nokia MF-2



- 2x16p PON line cards
- 32p GPON, XGS/Multi-PON, 8p 25G PON
- Network connectivity 4x(QSFP28)100GE/40GE/4x25GE or 4x10GE
- 2U box, for indoor or outdoor (Hardened), AC or DC powered

DZS V2



- 2x16p PON line cards
- 32p GPON, XGS/GPON Combo PON
- Network connectivity 4x(QSFP28)100GE
- 2U box, for indoor or outdoor (Hardened), DC powered

# Lightspan MF-8 vs DZSI v6

Nokia MF-8



- 8x16p PON line cards
- up to 128p GPON, XGS/Multi-PON, up to 64p 25G PON, 50Gb and 100Gb PON capable
- Network connectivity  
4x(QSFP28)100GE/40GE/4x25GE or 4x10GE
- 14U box, for indoor or outdoor (Hardened), DC powered

DZS V6



- 6x16p PON line cards
- up to 96p GPON, XGS, XGS/GPON combo PON, 50gb and 100gb PON capable
- Network connectivity  
2x(QSFP28)100GE/40GE/4x10GE
- 6U box, for indoor or outdoor (Hardened), DC powered



# Nokia MF-14 vs DZSI v14/v16

Nokia MF-14



- 14x16p PON line cards
- up to 224p GPON, XGS/Multi-PON, up to 64p 25G PON, 50Gb and 100Gb PON capable
- Network connectivity QSFP28 100GE/40GE/4x25GE or 4x10GE
- 24U box, for controlled environment, DC powered

DZS V14



- 14x16p PON line cards
- up to 224p GPON, XGS/GPON Combo PON, 50Gb and 100Gb PON capable
- Network connectivity QSFP28 100GE/40GE/4x25GE or 4x10GE
- 14U box, for indoor or outdoor (Hardened), DC powered

DZS V16



- 16x16p PON line cards
- up to 256p GPON, XGS/GPON Combo PON, 50Gb and 100Gb PON capable
- Network connectivity QSFP28 100GE/40GE/4x25GE or 4x10GE
- 14U box, for indoor or outdoor (Hardened), DC powered

# GPON ONT Comparison



**DZS 2401GN**

- 1x1GE



**DZS H665**

- 1x1GE, 1xPOTS



**Nokia G-010G-T**

- 1x2.5GE



**DZS 2411GN**

- 1x2.5GE, 1xPOTS
- Battery Backup capable



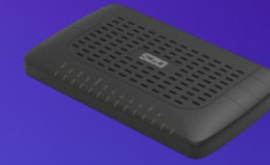
**DZS 2424GN**

- 4x1GE, 2xPOTS
- Battery Backup capable



**DZS 2434GN**

- 4x1GE, 2xPOTS
- Battery Backup capable



**DZS 2424A1**

- 4x1GE, 2xPOTS
- Battery Backup capable



**DZS 2425A1**

- 4x1GE, 2xPOTS
- 1xCOAX



**Nokia G-230G-A**

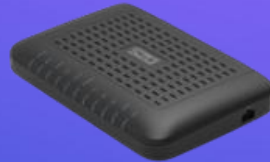
- 1x2.5GE, 2x1GE, 2xPOTS
- Battery Backup capable
- Temp Hardened

# XGS-PON ONT Comparison



**DZS 5211XG**

- 1x2.5GE, 1xPOTs



**DZS 5222XG**

- 1x10GE, 1x1GE, 2xPOTs



**DZS 5225A**

- 1x10GE, 4x1GE, 1xPOTs
- Battery Backup capable



**Nokia XS-230X-A**

- 1x10GE, 2x1GE, 2xPOTs
- Battery Backup capable
- Temp Hardened

OR



**Nokia XS-220X-A**

- 1x10GE, 1x1GE, 2xPOTs
- Battery Backup capable



**DZS 5302**

- 1x10GE, 1xGE



**DZS H842**

- 1x10GE, 1xGE



**Nokia XS-010X-R**

- 1x10GE



# WiFi ONT Comparison

## GPON



**DZS 2466GN**

- 4x1GE, 1xPOTS
- 2+2 Wifi6



**DZS H660GX**

- 4x1GE, 2xPOTS
- 2+2 Wifi6



**DZS 2428GN**

- 4x1GE, 2xPOTS
- 3+4 Wifi6



**Nokia G-2426G-B**

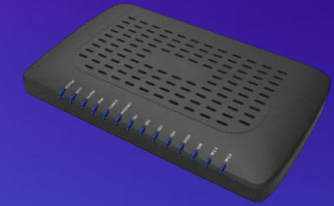
- 4x1GE, 2xPOTS
- 4+4 Wifi6

## XGS-PON



**DZS 5228XG**

- 1x2.5GE, 4x1GE, 2xPOTS
- 3+4 Wifi6



**DZS 5266XG**

- 1x2.5GE, 4x1GE, 2xPOTS
- 3+4 Wifi6

OR



**Nokia XS-2426G-B**

- 1x2.5GE, 3xGE, 2xPOTS
- 4+4 Wifi6 160Mhz



**Nokia XS-2426X-A**

- 1x10GE, 3xGE, 2xPOTS
- 4+4 Wifi6 160Mhz

# Beacon/WiFi only Comparison



**DZS NS-01**

- 2x1GE
- 2+2 Wifi5



**DZS NS-02**

- 2x1GE
- 2+2 Wifi6



**DZS NL19MESH**

- 4x1GE, 2xPOTs
- 2+2 Wifi5



**DZS NF18MESH**

- 4x1GE, 2xPOTs
- 2+2 Wifi5



**DZS NF18ACV**

- 4x1GE, 2xPOTs
- 2+2 Wifi5



**DZS NL20**

- Wifi6



**DZS NL20MESH**

- 4x1GE, 2xPOTs
- 2+2 Wifi6



**DZS NF20**

- 4x1GE, 2xPOTs
- 2+2 Wifi6



**DZS NF20MESH**

- 4x1GE, 2xPOTs
- 2+2 Wifi6



**DZS CFS40**

- 4x1GE
- 2+2 Wifi6



**DZS CF40MESH**

- 4x1GE
- 2+2 Wifi6



**DZS W550CA**

- 4x1GE
- 2+2 Wifi6



**DZS NGS605**

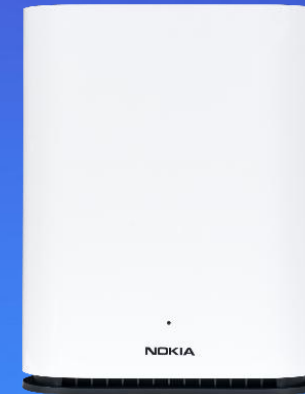
- 5x1GE Switch



**Nokia Beacon 3.1**

- 3x1GE
- 2+2 Wifi6

OR



**Nokia Beacon 6**

- 3x1GE
- 2+2+4 Wifi6

# Beacon/WiFi only Comparison

## DZS 1764WC-A

- 1x2.5GE, 2x1GE
- 2+2 Wifi6



## DZS 2428TE

- 1x2.5GE, 4x1GE, 2xPOTs
- 3+4 Wifi6

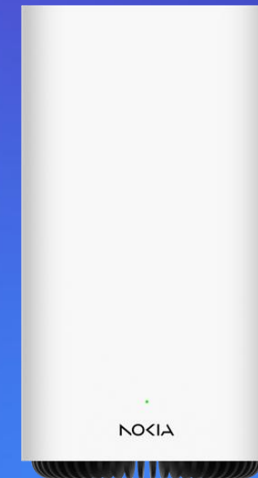


## Nokia Beacon G6

- 2x2.5GE, 2x1GE
- 4+4 Wifi6

## DZS CF60

- 1x10GE, 3x1GE, 2xPOTs
- 3+4 Wifi6E



## Nokia Beacon 19

- 2x10GE, 2x1GE
- 4+4+4 Wifi7



# POL Comparison



**DZS 2101HP**



- 1p PoE++



**GPON DZS 2628GN**  
• 8p, POTs

**GPON DZS 2644GN**  
• 4p, POTs

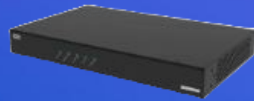
**XGS DZS 5205P**  
• 4p PoE++



**GPON DZS 2804P2**  
• In-Wall 4p PoE++



**GPON DZS 2840GN**  
• 4p PoE++



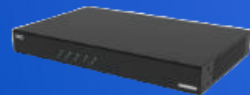
**GPON DZS 2629GN-R**  
• Rack Mounted 8p PoE++



**GPON DZS 2629GN**  
• 4p PoE++, POTs



**GPON DZS 2609GN**  
• 8p PoE++



**GPON DZS 2466GN-R**  
• Rack Mounted 4p, POTs



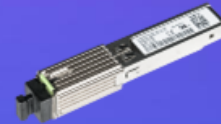
**Nokia FX Series**

POL  
Command  
Center

Transition to Lightspan  
Q3 2025



**Nokia G-010S-Q**  
GPON SFP ONT



**Nokia XS-010S-Q**  
XGS SFP ONT



**Nokia XS-230X-A**  
• XGS 1x10GE, 2x1GE, POTs



**Nokia U-880XP-P**  
• GPON/XGS 8p PoE++, POTs



**Nokia G-010G-T**  
• XGS 1x10GE



**Nokia G-040P-R**  
• GPON In-Wall 4x1GE PoE++



**Nokia XS-010X-R**  
• XGS 1x10GE

Aurelis  
Command  
Center



**Nokia MF-2**



**Nokia U-010X-A**  
• 25G 1p



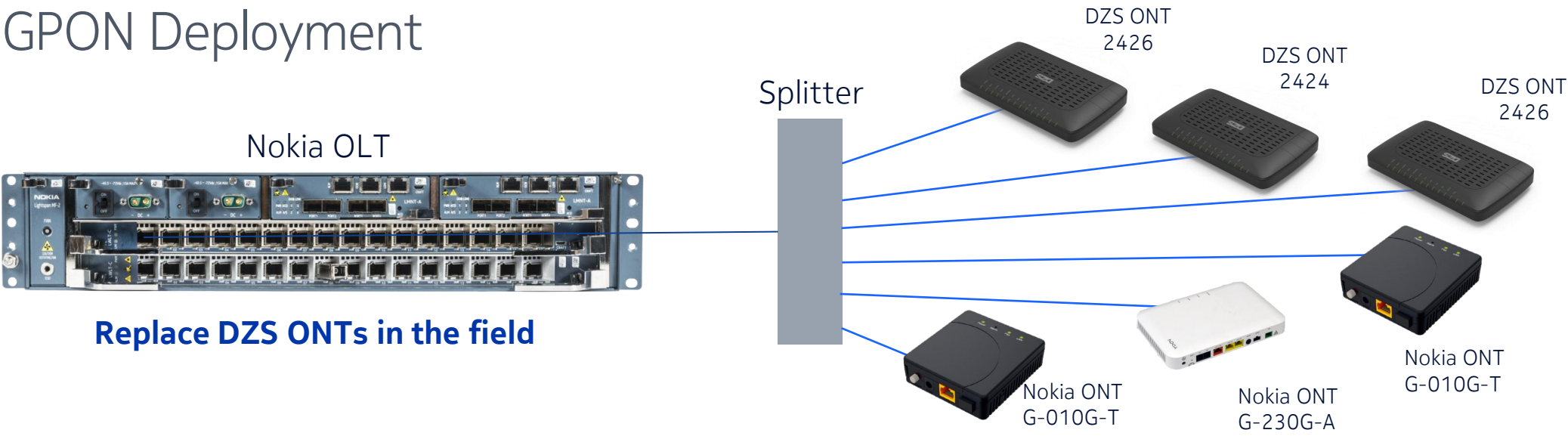
**Nokia G-040P-T**  
• GPON 4x1GE PoE++



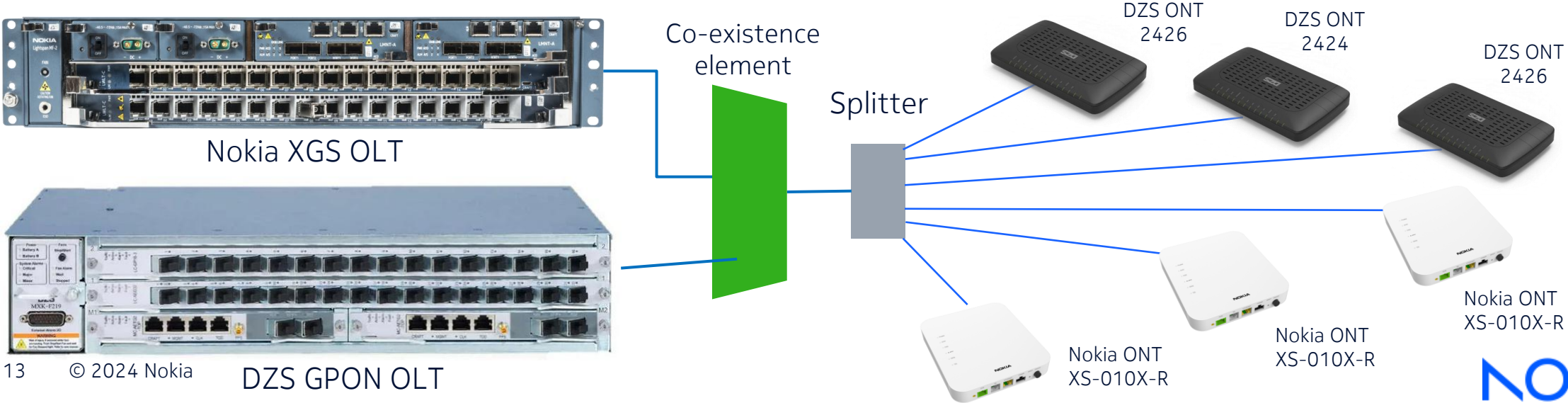
**Nokia U-00240XP-A**  
• XGS/25G 24p PoE++

**NOKIA**

# Nokia OLT / DZS ONTs Interoperability Cap n Grow GPON Deployment

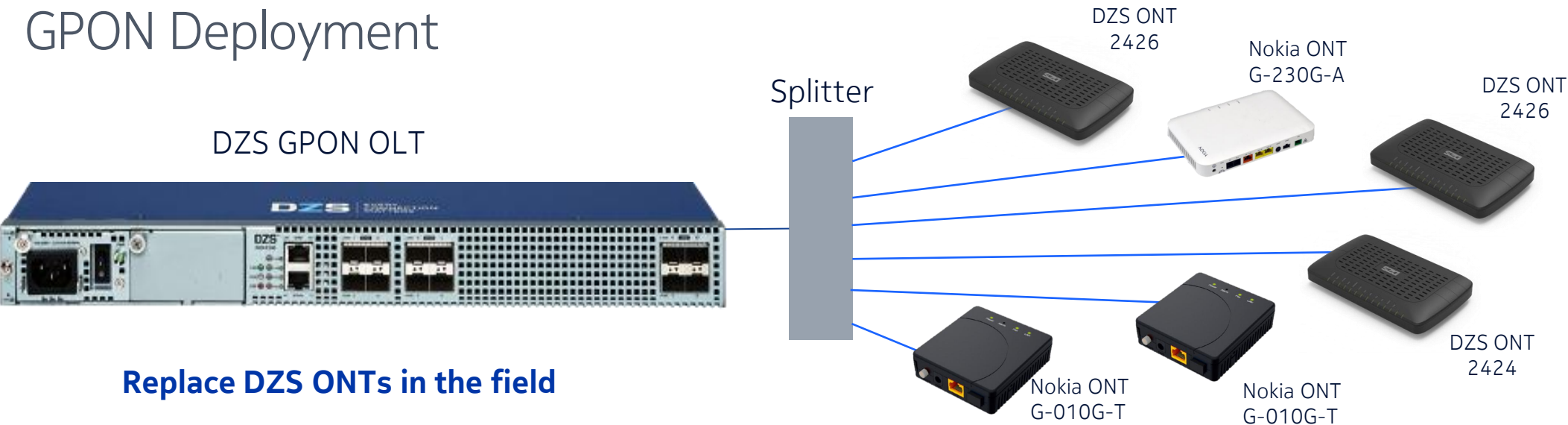


## DZS GPON - Nokia XGS OLT/ONT Co-existence

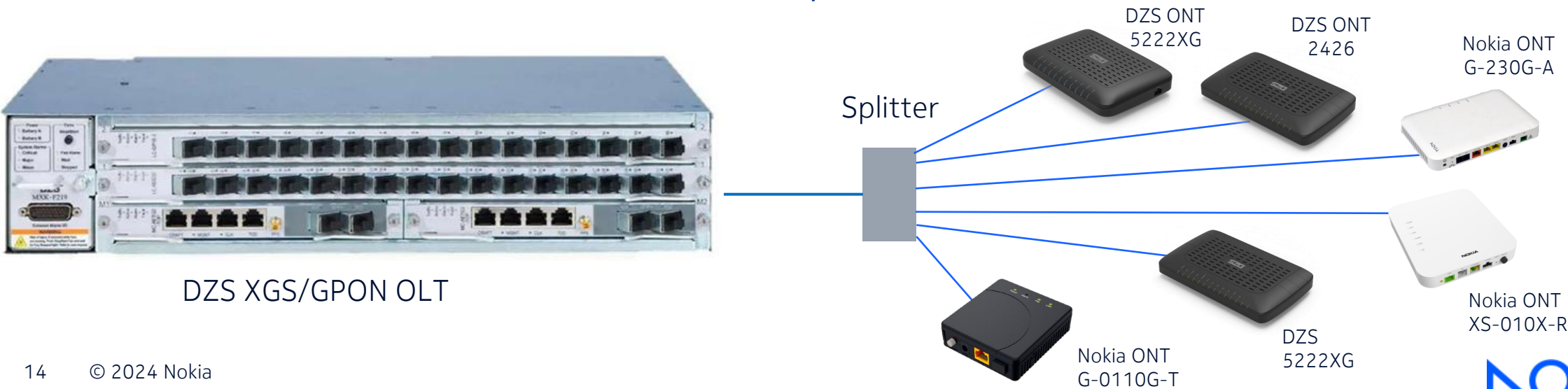


# DZS OLT / Nokia ONTs Interoperability

## GPON Deployment



## DZS – MPM/Combo PON





# Nokia OLT – DZS ONT Interop Products



# DZS OLT – Nokia ONT Interop Products



= Data



= IPTV



= Voice



Nokia ONT  
XS-010X-R



Nokia ONT  
G-230G-A



Nokia ONT  
XS-220X-A



Nokia ONT  
G-010G-T

# DZS Customer Questionnaire

1. What models of DZS OLTs in the network? What current OLT software?
2. What models of DZS ONTs in the network? What current ONT software?
3. Services provided in the network? High Speed Internet, Voice, IPTV Multicast Video, Business services...etc.
4. What are your High Speed Internet service levels? 100Mb, 300Mb, 500Mb, 1Gb, 2Gb+...etc.
5. GPON, XGS or a Mix of technologies in the network?
6. Current split level in the field? 1:16, 1:32, 1:64...etc?
7. Managed Wifi?
8. Requirement of outdoor ONT installation?



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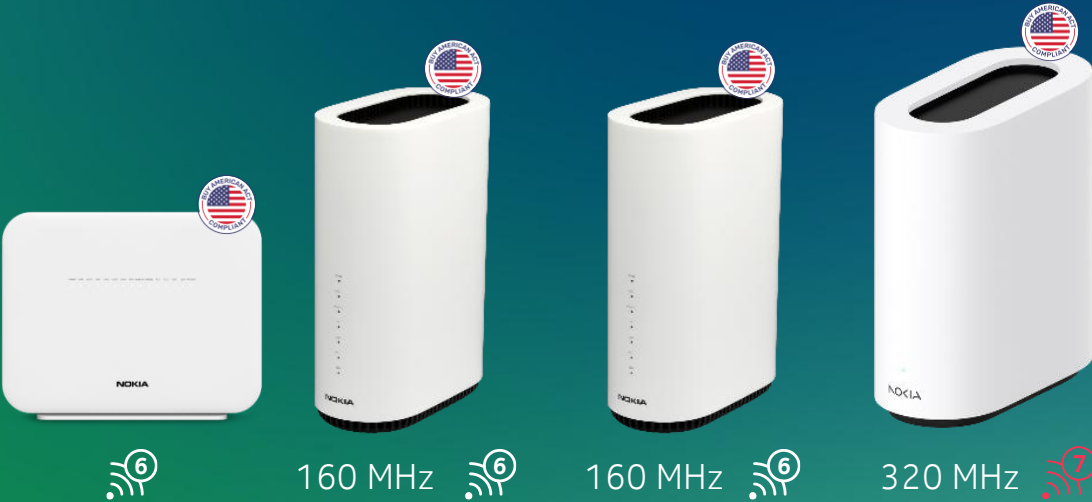
# Nokia mesh-enabled ONTs

## GPON ONTs



| G-2425G-A        | G-2425G-B          | G-2426G-A        | G-2426G-B        |
|------------------|--------------------|------------------|------------------|
| AC1200 (2+2)     | AC2300 (4+4)       | AX1800 (2+2)     | AX3600 (4+4)     |
| 2 POTS           | 2 POTS             | 2 POTS           | 2 POTS           |
| 4 x GE LAN       | 4 x GE LAN         | 4 x GE LAN       | 4 x GE LAN       |
| -                | -                  | -                | -                |
| Part #3FE48292AA | Part #3FE48292AB   | Part #3FE49220AA | Part #3FE49441AA |
|                  | Powered by Corteca |                  |                  |

## XGS-PON ONTs



| XS-2426G-A       | XS-2426G-B         | XS-2426X-A         | XS-2437X-B         |
|------------------|--------------------|--------------------|--------------------|
| AX1800 (2+2)     | AX6000 (4+4)       | AX6000 (4+4)       | BE19000 (4+4+4)    |
| 2 POTS           | 2 POTS             | 2 POTS             | 2 POTS             |
| 4 x GE LAN       | 1x 2.5 GE LAN      | 1x 10 GE LAN       | 1x 10 GE LAN       |
| -                | + 3x GE LAN        | + 3x GE LAN        | + 3x GE LAN        |
| Part #3FE49351AA | Part #3FE49542AB   | Part #3FE49690AA   | Part # TBD         |
|                  | Powered by Corteca | Powered by Corteca | Powered by Corteca |



# Mesh-enabled Nokia WiFi Beacons



Beacon 1.1

AC1200 (2+2)

1x GE WAN

2x GE LAN

-

Part #3FE49234AA



Beacon 3.1

AX3000 (2+2)

1x GE WAN

2x GE LAN

-

Part #3TN00511AA

Powered by Corteca



Beacon 6

AX4200 (2+2+4)

1x GE WAN

2x GE LAN

1x USB

Part #3FE48064AE

Powered by Corteca



Beacon G6

AX6000 (4+4)

1x 2.5GE WAN

1x 2.5GE, 2x GE LAN

Beacon G6.2: PoE+

Part #3FE49882AC

Powered by Corteca



Beacon 10

AX10200 (2+4+4)

1x 10GE WAN

1x 2.5GE, 2x GE LAN

Later: PoE+, POTS

Part #3TN00195AA

Powered by Corteca



Beacon 19

BE19000 (4+4+4)

1x 10GE WAN

1x 10GE, 2x GE LAN

Part #3TN00784AB

Powered by Corteca



Beacon 24

BE24000 (4+4+4+4)

1x 10GE WAN

1x 10GE, 2x 2.5GE LAN

Later: PoE+, GPS

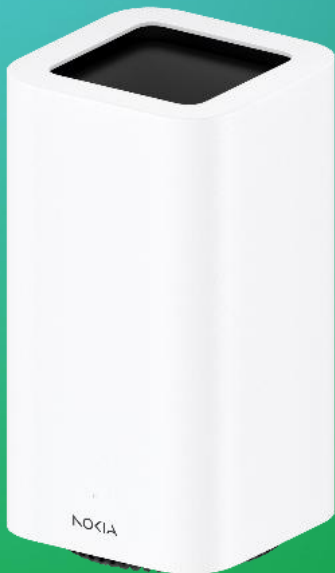
Part #3TN00539AA

Powered by Corteca

# Nokia WiFi 7 ONT and Beacons

Powered by Corteca

320MHz 



| Beacon 24            | XS-2437X-B         | Beacon 19          | Beacon 19.1         | Beacon 9            | Beacon 4            |
|----------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| BE24000 (4+4+4+4)    | BE19000 (4+4+4)    | BE19000 (4+4+4)    | BE19000 (4+4+4)     | BE9300 (2+2+2)      | BE3600 (2+2)        |
| 1x 10GE WAN          | XGS WAN            | 1x 10GE WAN        | 1x 10GE WAN         | 1x 2.5GE WAN        | 1x 2.5GE WAN        |
| 1x10GE, 2x 2.5GE LAN | 1x 10GE, 2x1GE LAN | 1x 10GE, 2x1GE LAN | 1x 10GE, 2x1GE LAN  | 1x 2.5GE, 1xGE LAN  | 2xGE LAN            |
| -                    | 2x POTS            | -                  | -                   | -                   | -                   |
| Available            | Available          | Available          | Available 4Q - 2025 | Available 4Q - 2025 | Available 3Q - 2025 |