

## 80GHz Backhaul Range

SIL FDD 801G-PCP  
SIL FDD 802G-PCP  
SIL FDD 805G-PCP  
SIL FDD 8010G-PCP



### 80GHz Licensed Wireless Backhaul

**SIL FDD 801G-PCP**  
80GHz 1Gbps  
FDD 30cm antenna

**SIL FDD 802G-PCP**  
80GHz 2Gbps  
FDD 30cm antenna

**SIL FDD 805G-PCP**  
80GHz 5Gbps  
FDD 30cm antenna

**SIL FDD 8010G-PCP**  
80GHz 10Gbps  
FDD 30cm antenna

#### OVERVIEW

The SilverNet 80GHz Backhaul Range is a high capacity wireless outdoor bridge with carrier grade full duplex capacity that has been optimised for interference-free operation for distances up to **5km** with speeds of up to **10Gbps** throughput.

The 80GHz link comes complete with ruggedised brackets, PoE injector, 2 x 25 metre external grade Ethernet cable and includes a **2 year** return to factory warranty as standard.

#### Features

- 80GHz Frequency
- Point-to-Point up to 5km
- Up to 10Gbps throughput
- Designed for outdoor applications with rugged case design
- ACM Adaptive code and modulation
- AES 256-BIT Encryption
- BPSK 4/16/32/64/128/256 QAM Modulations
- Channel bandwidth 250MHz up to 2000MHz
- 10Gbps Gigabit or Gigabit interfaces
- Power over Ethernet (PoE)
- WEB Management
- VLAN management
- Multi layer header compression
- ETSI and FCC compliant
- Integrated 30cm or 60cm Antenna
- SilverView Network Management Software
- 2 Year warranty

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## Technical Specifications

Backhaul Range	80GHz up to 2.5Gbps			80GHz up to 10Gbps				
<b>Radio Specification</b>								
Frequency	80 GHz (71 - 76GHz, 81 - 86GHz)							
Configurations	(1+0), (1+1), (2 +0)							
Modulation	BPSK/4/16/64 QAM with Adaptive Code and Modulation			4/16/32/64/128/256 QAM with Adaptive Code and Modulation				
Ethernet Throughput	1Gbps Ethernet to 2.5Gbps optical			1Gbps Ethernet to 10Gbps optical				
Traffic Interfaces	2 x GE electrical / optical or 1 x 2.5 Gbps optical			4 x GE electrical / optical or 2 x 10Gbps optical				
Output Power (dBm)	250 MHz	500MHz	1000 MHz	250 MHz	500MHz	750MHz	1000 MHz	2000 MHz
4 QAM	18	18	18	18	18	18	18	18
16 QAM	15	15	-	15	15	15	15	15
32 QAM	-	-	-	15	15	15	15	15
64 QAM	13	13	-	13	13	13	13	13
128 QAM	-	-	-	12	12	12	12	12
256 QAM	-	-	-	11	11	11	11	11
Receiver Sensitivity	250 MHz	500MHz	1000 MHz	250 MHz	500MHz	750MHz	1000 MHz	2000 MHz
4 QAM	-73	-70	-64	-72,5	-69,5	-67,5	-66,5	-63,5
16 QAM	-64	-61	-	-67	-64	-62	-61	-58
32 QAM	-	-	-	-64	-61	-59	-58	-55
64 QAM	-58	-55	-	-61	-58	-56	-55	-52
128 QAM	-	-	-	-57,5	-54,5	-53	-51,5	-48,5
256 QAM	-	-	-	-54,5	-51,5	-49,5	-48,5	-
Frequency Stability	±5 ppm							
ATPC	20 dB range implemented in 1dB steps							
RTPC	Up to 20 dB in 1 dB step, software programmable							
Connector	RJ45 or SFP Optical Plug-in							
<b>Security - Network</b>								
Encryption	AES 256-BIT (AES activated via license Key upgrade)							
Flow Control	Flow Control (IEEE 802.3x)							
LLF	Link Loss Forwarding							
MAC, QoS	MAC address switching, ageing and learning, Ethernet QoS (IEEE802.1p)							
VLAN	VLAN/VLAN STACKING (IEEE 802.1ad with QinQ) / selective QinQ based on VLAN and 802.1p priority							
<b>Electrical – Interface</b>								
LAN/WAN	10/100/1000 BASE-T (RJ-45) or SFP Optical Plug-in							
Power	PoE (proprietary) or separated power feeding							
Power Consumption	32W to 53W in 1+0 configuration			70W in 1+0 configuration				
<b>Management</b>								
Remote Connection	Web, Telnet, SSH, SilverView Monitoring							
<b>Physical</b>								
Dimensions	Radio 290 x 302,5 x 117,6 (mm)			Radio 252 x 363 x 117 (mm)				
Weights	12.5Kg (2km assembled unit) 30cm Antenna 15.5Kg (5km assembled unit) 60cm Antenna							
Dust and Waterproof	IP65 Certified			IP67 Certified				
Operating Temperature	-35°C to +55°C							
<b>Other</b>								
Compliant with	ETSI EN 302 217 / FCC CFR 47, Part 101 and Part 15							
Warranty	2 Year Parts and labour							

## Typical Application



Part Code	Description
SIL FDD 801G-30-PCP	80GHz, 1Gbps 30cm Dish full duplex capacity link, up to 2km
SIL FDD 802G-30-PCP	80GHz, 2Gbps 30cm Dish full duplex capacity link, up to 2km
SIL FDD 805G-30-PCP	80GHz, 5Gbps 30cm Dish full duplex capacity link, up to 2km
SIL FDD 8010G-30-PCP	80GHz, 10Gbps 30cm Dish full duplex capacity link, up to 2km
SIL FDD 801G-60-PCP	80GHz, 1Gbps 60cm Dish full duplex capacity link, up to 5km
SIL FDD 802G-60-PCP	80GHz, 2Gbps 60cm Dish full duplex capacity link, up to 5km
SIL FDD 805G-60-PCP	80GHz, 5Gbps 60cm Dish full duplex capacity link, up to 5km
SIL FDD 8010G-60-PCP	80GHz, 10Gbps 60cm Dish full duplex capacity link, up to 5km