

Gigabit für alle – die G.hn Lösung!

Mit dem G.hn System vernetzen Sie Ihre Einrichtung über die bestehenden Koaxialkabel (also die TV-Verkabelung) Ihres Hauses. Dadurch wird ein schneller und unkomplizierter Einstieg in die multimediale Zukunft möglich. Ihre Gäste können Hochgeschwindigkeits-Internet (bis zu symmetrische Gigabit-Geschwindigkeit), zuverlässiges WLAN, Free-to-Guest-TV, ältere Pay-per-View-Inhalte, IPTV, HD-Streaming und andere Hoteldienste genießen

- Einbau im laufenden Betrieb möglich (kurze Migrationszeit)
- keine umfangreichen Baumaßnahmen
- kein Schmutz, kein Lärm
- keine weiteren Brandschutzmaßnahmen notwendig
- zuverlässiges High-Speed Netzwerk für WLAN und andere Dienste
- Technologiepartnerschaft mit führenden Netzwerkausrüstern wie HPE aruba, Cisco Meraki, Ruckus und Cambium Networks
- zertifiziert von Marriott GPNS für HSIA, IHG Studio, IHG Connect, Hyatt, Caesars Entertainment und weiteren großen Ketten und Hotels

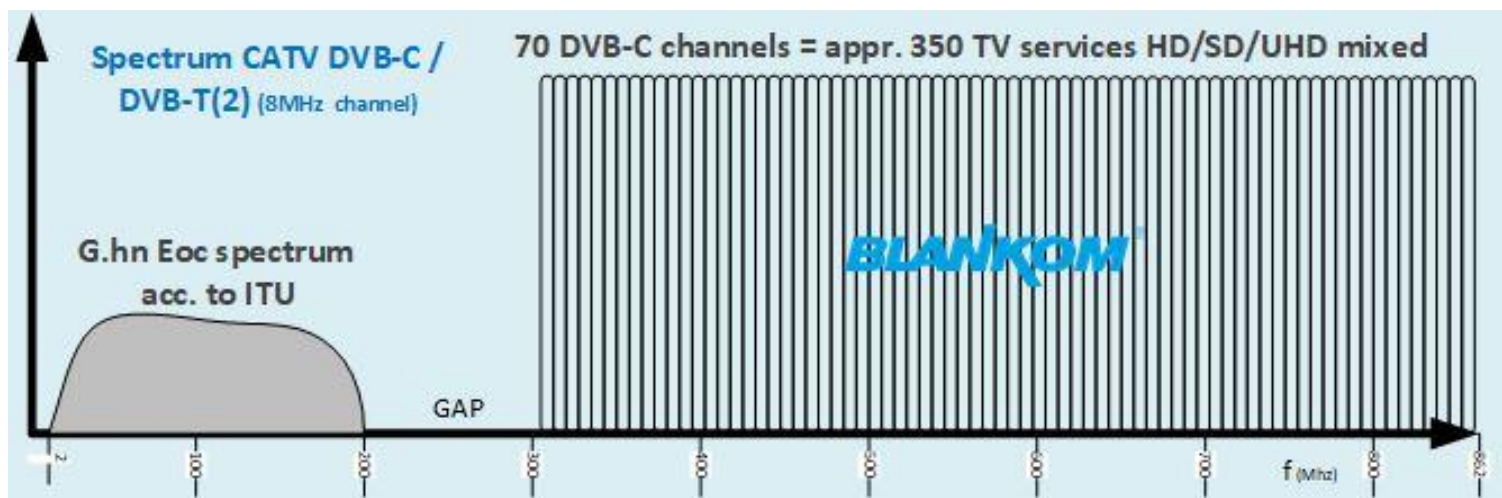
in english:

Gigabit for everyone - the G.hn solution!

With the G.hn system, you can network your equipment via the existing coaxial cables (i.e. the TV cabling) in your home. This enables a quick and uncomplicated entry into the multimedia future. Your guests can enjoy high-speed Internet (up to symmetrical gigabit speed), reliable Wi-Fi, free-to-guest TV, older pay-per-view content, IPTV, HD streaming and other hotel services

- Installation possible during operation (short migration time)
- No extensive construction work
- No dirt, no noise
- No further fire protection measures necessary
- Reliable high-speed network for WLAN and other services
- Technology partnership with leading network equipment providers such as HPE aruba, Cisco Meraki, Ruckus and Cambium Networks
- certified by Marriott GPNS for HSIA, IHG Studio, IHG Connect, Hyatt, Caesars Entertainment and other major chains and hotels

Technology:



Gigabit G.hn EoC Controller & Receiver



BEM- 100

Gigabit EoC Master Controller:
Available with 1 or 2 Ethernet Ports:
BEM-101/-102
1 Master is serving 16 / 32 Receivers
PoE and PoC

FEATURES

- Use existing coaxial cable
- Network max. speed > 1Gbps
- Easy installation
- PoC and PoE support (not for BEW WIFI6)
- Save costs
- No TV signal interference
- Supply IPTV infrastructure over Coax

Specification:

Frequency Range EoC: 5 - 200 MHz
 Frequency Range TV : 300 - 862 MHz
 Impedance: 75Ω
 Ethernet Interface: 10/100/1000Mb/s
 Network Throughput: max. 1,2 Gbps

LED Indicators:

Ethernet (Green), Secure (Green)
 Link Quality (Green/Red/Orange)

Connectors:

Connector TV : F-female
 Connector EoC : F-female
 Connector LAN : RJ-45 female

Environment Conditions

Operating Temperature Range: 0...40°C
 Storage Temperature Range: -10...70°C
 Operating Humidity: 10%...95%

BES- 100

Gigabit EoC Receiver:
Available with 1,2 or 4 Ethernet
Ports: BES-101/-102/-104

PoC feature:

BEM-Master serves power over
Coax to BES Receivers
and PoE:

Power over Ethernet feature is
available as well (not with BEW-100 WIFI
Access Point).



Gigabit EoC Receiver & WiFi 6 AP



BEW-100 FEATURES

- High speed data transmission
- Use existing coaxial cable
- Co-exist with TV signal
- Easy installation, wall or desk
- Extended network range with WiFi 6

SPECIFICATIONS

Standards

- IEEE 802.3/802.3u/802.3ab
- ITU-T G.9960/G.9961 G.hn over Coax
- IEEE 802.11 a/b/g/n/ac/ax
- G.hn Frequency: 2 – 200MHz

Data Rates

- G.hn: up to 1,7Gbps
- Ethernet: 10/100/1000Mbps
- WiFi: 5GHz up to 1200Mbps
2.4GHz up to 300Mbps

Transmission Range

- G.hn: up to 70dBm attenuation
- Ethernet: maximum 100 meters

Interface

- F connectors: TV+Data port / TV port
- Antennas: Built-in Antenna
- Ethernet port: LAN (10/100/1000Mbps)
- Reset button: Pair/Reset (for G.hn)
- WPS button: WPS /Reset (for WiFi)

General

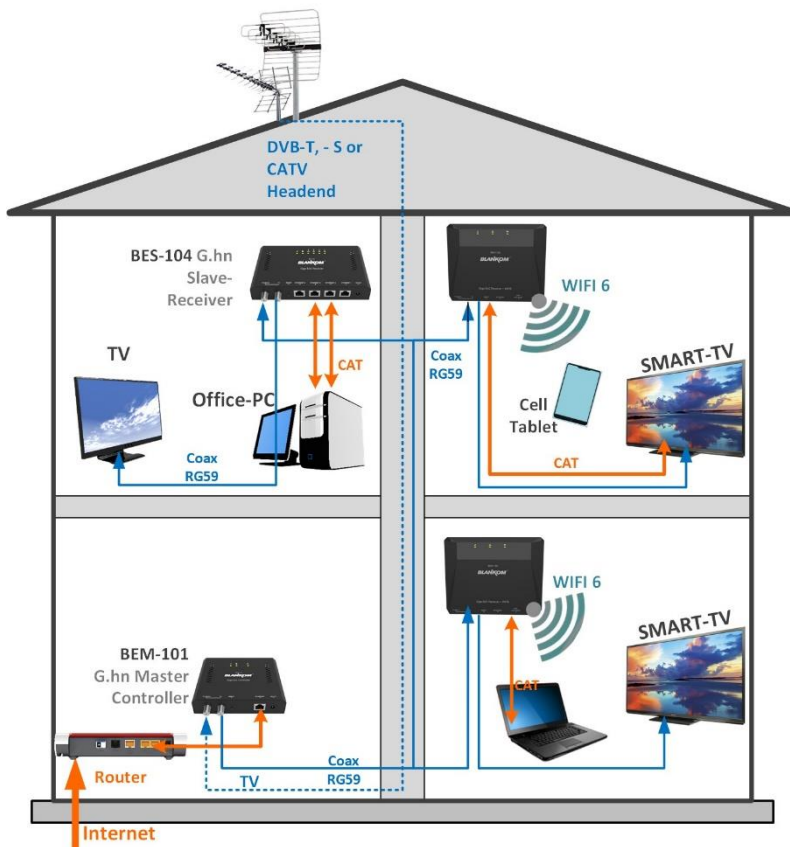
- Power external PSU 12 V DC
- Dimensions: 143 x121 x29mm (without rack)

Environmental for operating:

- Temperature 0°C - 40°C (32°F - 104°F)
- Humidity 10% - 95% RH

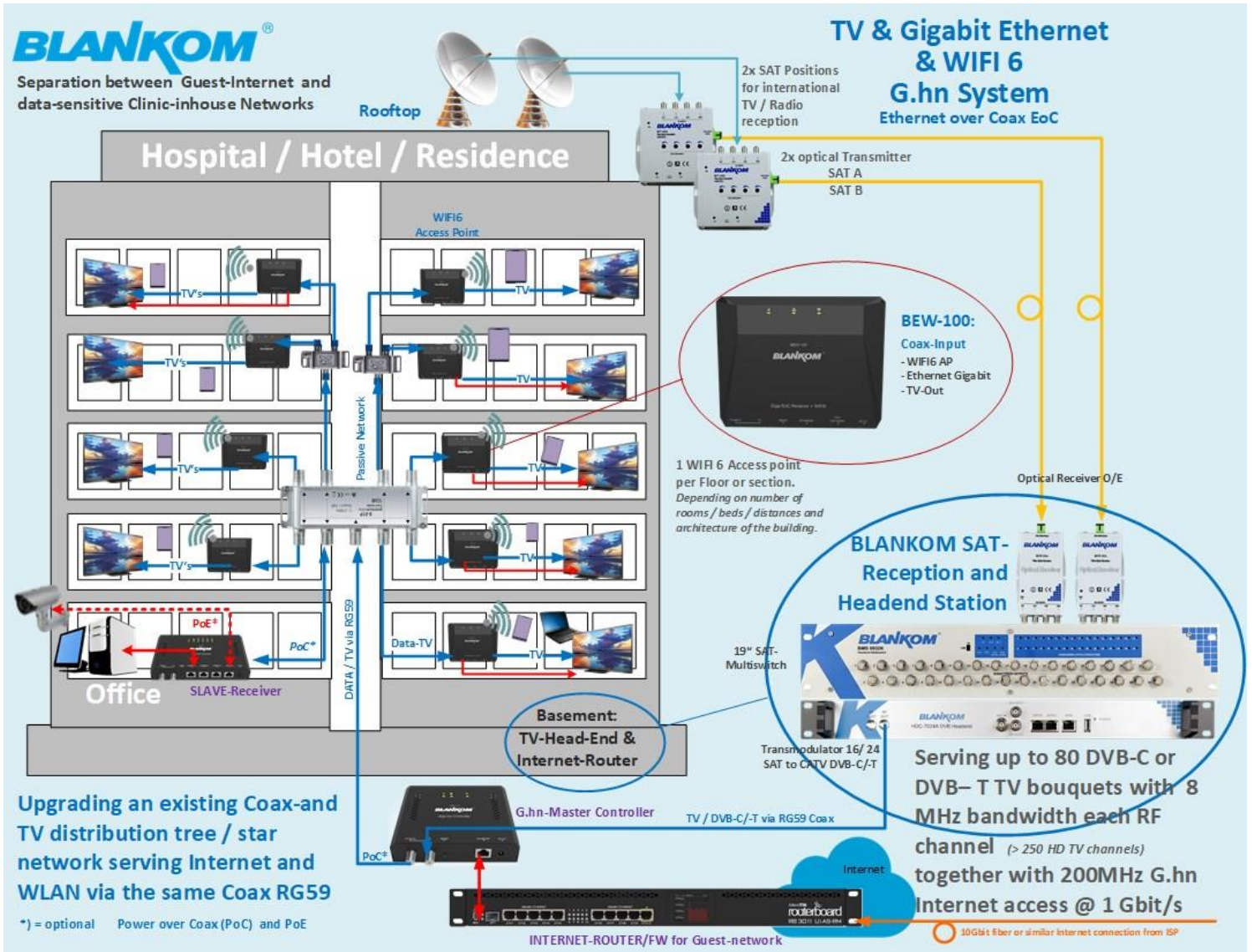
Environmental for storage:

- Temperature -10°C - 70°C (14°F - 158°F)
- Humidity 10% - 95% RH



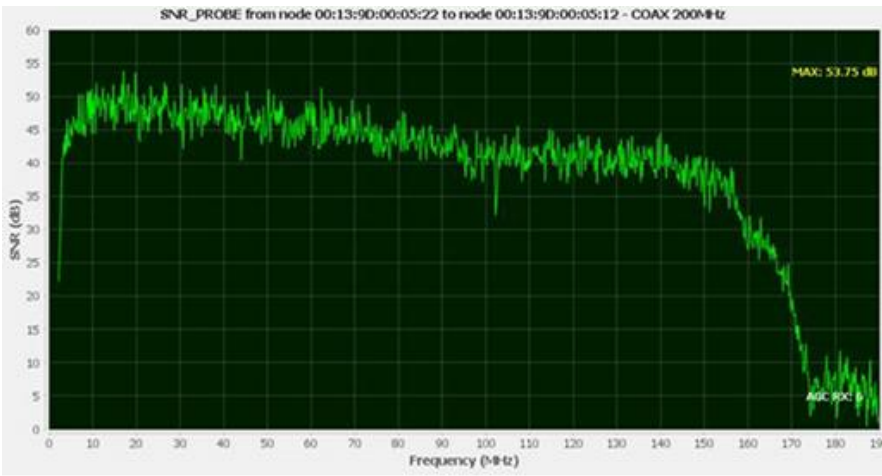
Application Example Hospitality:

BLANKOM Headend: 2 SAT Positions selected n x Transponders trans-modulated to n x DVB-C Channels, Internet served by ISP and a Mikrotik Router/Firewall -> Master Controller -> Slave Receiver + WIFI Access points



ITU technical overview G.hn:

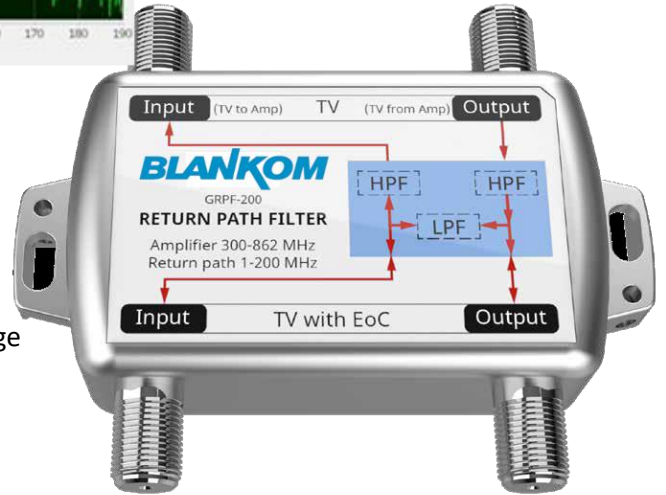
Area	Sub-area	Power Lines	Coaxial Cable	Twisted Pair
Physical Layer	Line code	DMT (Discrete Multi-Tone)		
	Maximum modulation	4096-QAM (12 bits/tonesymbol)		
	Spectrum used	2-80 MHz	5-200 MHz	2-200 MHz
	Tone spacing	24.4 kHz	195.3 kHz	48.8 kHz
	MIMO support	Yes	No	Yes
	Forward Error Correction	LDPC (Low Density Parity Check)		
	PHY layer max rate ²	1500 Mbit/s	2000 Mbit/s	4000 Mbps
Data Link Layer	MAC layer max rate ³	1000 Mbit/s	1700 Mbit/s	3400 Mbps
	Automatic Retransmission (ARQ)	Yes		
	Medium Access	TDMA, coordinated by a Domain Master (DM)		
	Encryption	AES-128		
	Quality of Service (QoS)	8 levels		



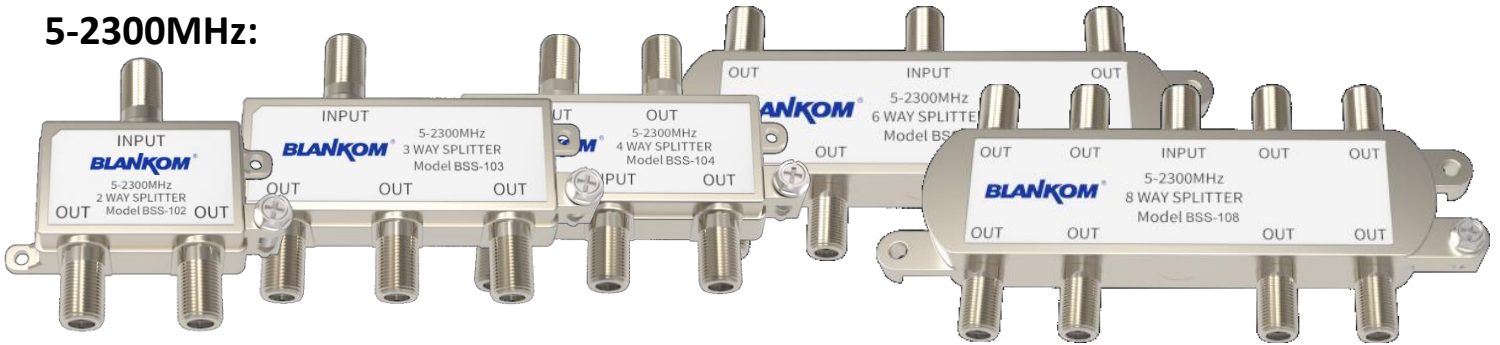
Available Accessory:

Return-path filter GRPF-200 to use an Amplifier for TV Signals > 300 Mhz.

Standard CATV Amplifier/Splitter/Combiner/Taps can be used from the public market as long as they serve the frequency range needed: 2 - 862MHz.



Combiner/Splitter 1-2, 1-3, 1-4, 1-6, 1-8 5-2300MHz:



Amplifier:

