

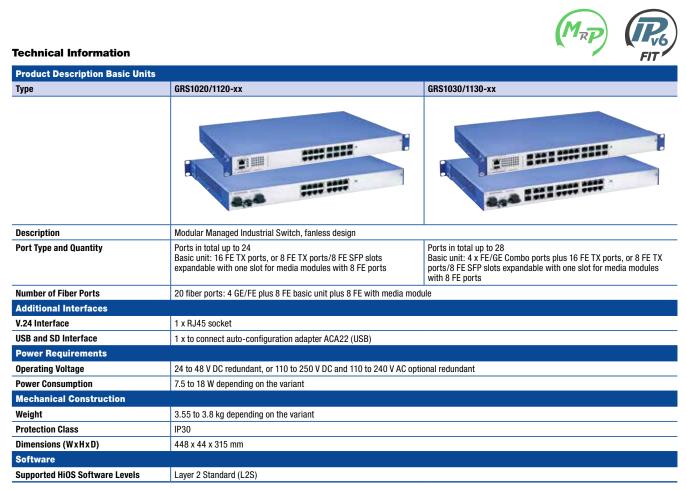
GREYHOUND 19" Ruggedized Rack-Mount Switches and Media Modules

The GREYHOUND Gigabit Ethernet switches are offered in two basic versions. The configuration options include:

• 16 Fast Ethernet TX ports

- Eight Fast Ethernet TX ports, plus eight Fast Ethernet small form-factor pluggable (SFP) ports
- It is also possible to add four Gigabit Ethernet Combo ports

The basic units offer a media module slot that allows customers to add or change ports in the field, as their network design requirements change in the future. The modules can be ordered in versions from all-copper to all-fiber, depending on the individual need.



NOTE: These are the prominent technical specifications. For complete technical specifications visit: www.hirschmann.com



Technical Information

Product Description Media Modules for GREYHOUND					
Туре	GRM20-xx				
Port Type and Quantity	up to 8 FE ports, more details in the configurator for ST, SC, RJ45, SFP slots				
Power Consumption	2 to 9 W depending on the variant				
Weight	450 to 650 g depending on the variant				

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Common Technical Data Basic Units and Media Modules

0 to 100 m				
0 to 550 m, 7.5 dB link budget; 62.5/125 μm 0 to 275 m, 7.5 dB link budget (with M-SFP-SX/LC)				
0 to 20 km, 11 dB link budget (with M-SFP-LX/LC); 14 to 42 km, 5 to 20 dB link budget (with M-SFP-LX+/LC)				
23 to 80 km, 5 to 22 dB link budget (with M-SFP-LH/LC); 71 to 128 km, 15 to 30 dB link budget (with M-SFP-LH+/LC)				
0 to 100 m				
0 to 5000 m, 8 dB link budget; 62.5/125 μ m, 0 to 4000 m, 11 dB link budget (with M-Fast SFP-MM/LC)				
0 to 25 km, 13 dB link budget (with M-Fast SFP-SM/LC); 25 to 65 km, 10 to 29 dB link budget (with M-Fast SFP-SM+/LC)				
47 to 104 km, 10 to 29 dB link budget (with M-Fast SFP-LH/LC)				
Any				
>200 switches MRP				
0 °C to +60 °C, or -40 °C to +70 °C, IEC 60068-2-2 Dry Heat Test +85 °C 16 hours, optional conformal coating				
5% to 95%				
EN 60950-1, EN 61131-2, cUL60950-1				
IEC 61850-3, IEEE 1613				
GL – Germanischer Lloyd (pending)				
ISA-12.1201 Class 1 Div. 2 Group A, B, C, D (pending)				
NEMA TS2, EN 50121-4				
ACA22-USB EEC 942 124-001				

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GREYHOUND GRS1020/GRS1120/GRS1030/GRS1130 Switch Configurations

GRS1 0 30-16T9 S M M V9 HH S E 2S XX.X
Design A A A A A A A A A A A A A A A A
Port Position
 0 = Ethernet ports on front and power supply input on rear 1 = Ethernet ports and power supply input on rear (cabling side)
Data Rate
20 = FE-Switch 30 = FE-Switch with GE-Uplink Ports
Number of Fast Ethernet Ports
16T9 = 16 Fast Ethernet TX Ports 8T8F = 8 Fast Ethernet TX Ports and 8 Fast Ethernet SFP Slots
S= 0 °C to +60 °CT= -40 °C to +70 °CE= -40 °C to +70 °C conformal coating
Power Supply 1 C = 24 to 48 V DC M = 110 to 250 V DC and 110 to 240 V AC
Power Supply 2
Approvals
Z9 = CE; FCC; EU SafetyY9 = Z9, US SafetyX9 = Z9, US Safety, Hazardous LocationV9 = Z9, SubstationVY = Z9, US Safety, SubstationVU = Z9, US Safety, Substation, MarineVT = Z9, US Safety, Substation, TransportationU9 = Z9, MarineUY = Z9, US Safety, MarineUT = Z9, US Safety, Marine, TransportationUX = Z9, US Safety, Marine, Hazardous. LocationT9 = Z9, TransportationTY = Z9, US Safety, TransportationU1 = Z9, US Safety, Marine, Hazardous. Location
Customization HH = Hirschmann Standard
Hardware Configuration S = Standard
Software Configuration E = Standard
Software Level
Software Version XX.X= Current Software Release



GREYHOUND GRM20 Media Modules Configurations

		G R M 2 0 - M N	I MM T	ΤΤΞ	S V 9	H H S
Design GRM = GREYHOUND Switch Media Modules						
Data Rate						
Port Configuration 1 and 2 TT = 2 x Twisted Pair TX, RJ45, 100 Mbit/s MM = 2 x Multimode FX, DSC, 100 Mbit/s VV = 2 x Singlemode FX, DSC, 100 Mbit/s	ZZ = 2 x SFP Slots, 100 Mbi NN = 2 x Multimode FX, ST, UU = 2 x Singlemode FX, ST	100 Mbit/s				
Port Configuration 3 and 4 TT = 2 x Twisted Pair TX, RJ45, 100 Mbit/s MM = 2 x Multimode FX, DSC, 100 Mbit/s VV = 2 x Singlemode FX, DSC, 100 Mbit/s 99 = Not equipped	ZZ = 2 x SFP Slots, 100 Mbi NN = 2 x Multimode FX, ST, UU = 2 x Singlemode FX, ST	100 Mbit/s				
Port Configuration 5 and 6 TT = 2 x Twisted Pair TX, RJ45, 100 Mbit/s MM = 2 x Multimode FX, DSC, 100 Mbit/s VV = 2 x Singlemode FX, DSC, 100 Mbit/s 99 = Not equipped	ZZ = 2 x SFP Slots, 100 Mbi NN = 2 x Multimode FX, ST, UU = 2 x Singlemode FX, ST	100 Mbit/s				
Port Configuration 7 and 8 TT = 2 x Twisted Pair TX, RJ45, 100 Mbit/s MM = 2 x Multimode FX, DSC, 100 Mbit/s VV = 2 x Singlemode FX, DSC, 100 Mbit/s 99 = Not equipped	ZZ = 2 x SFP Slots, 100 Mbi NN = 2 x Multimode FX, ST, UU = 2 x Singlemode FX, ST	100 Mbit/s				
Temperature Range $S = 0 \degree C to +60 \degree C$ $T = -40 \degree C to +70 \degree C$ $E = -40 \degree C to +70 \degree C$ conformal coating						
ApprovalsZ9= CE, FCC, EU SafetyX9= Z9, US Safety, Hazardous LocationVY= Z9, US Safety, SubstationVT= Z9, US Safety, Substation, TransportationUY= Z9, US Safety, MarineUX= Z9, US Safety, Marine, Hazardous. LocationTY= Z9, US Safety, Transportation	Y9 = Z9, US Safety V9 = Z9, Substation VU = Z9, US Safety, Substat U9 = Z9, Marine UT = Z9, US Safety, Marine, T9 = Z9, Transportation					
Customization						
Hardware Configuration						

S = Standard