

- ❖ 2x SFP+ Slots 10 GBASE-R
- ❖ 8x RJ45 Ports 10/100/1000 BASE-T
- ❖ Serial Buses 2x RS485 / RS422 / Modbus
- ❖ 2x Digital/Alarm Inputs
- ❖ 1x Programmable Relay Output
- ❖ 2x Independent Supply Inputs
- ❖ Redundant Topology LAN-RING, RSTP
- ❖ Event Management with Support:  
HTTP/ONVIF Client, E-mail, IP Watchdogs, ETH Events, TCP, Modbus, DIO, Balanced Loops...
- ❖ SNMPv3 Encrypted Management

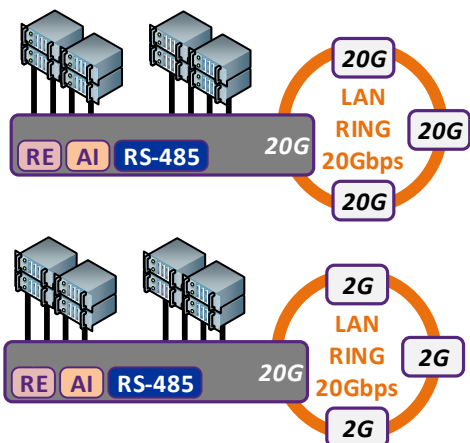
- ❖ VLAN, QoS, SNMP, SMTP, STNP, IGMPv1/2, RSTP, LLDP, 802.1X
- ❖ Overvoltage Protections up to 30A (8/20µs)
- ❖ Operating Range -40°C to +70°C
- ❖ Operating Range of Components -40°C to +85°C

PRODUCT NAME	CODE	NOTE
20G-2X.8.0.F-BOX	1-981-220	10-60VDC/10-30VAC
Holders for DIN35, Flat Surface and to 10" Cabinets are Included.		
AVAILABLE PORTS:	SFP+ GE DI/BI RE RS485/422	
	2 8 2 1 2/1	
Na www.metel.eu naleznete dostupné SFP moduly.		

L2 switches 20G-2X.8.0.F-BOX expand the successful series of 2G switches with a backbone L2 switch with 10Gbps full duplex throughput on 2 optical ports. They support connections in ring topology, cascade ring topology, mesh and point-to-point. Industrial design and surge protection of all metallic ports, inputs and outputs guarantee reliable operation even in demanding outdoor and industrial applications.

### Typical Connection in RING Topology

Depending on the SFP modules used, 20G switches support both 10Gbps full duplex (LAN-RING 20G) and 1Gbps full duplex (LAN-RING 2G) optical ring connections.

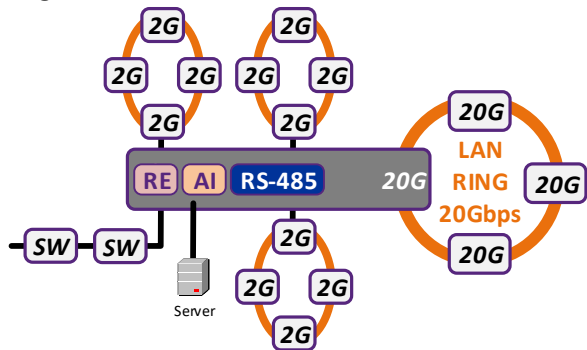


**LEGEND:**

	10 GBASE-R		RS-485	RS485
	1000 BASE-X		AI	Alarm Input
	1000 BASE-T		RE	Relay Output

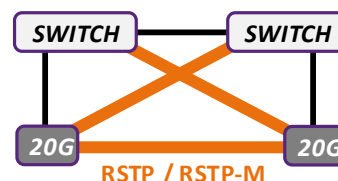
### Typical Connection in Cascade

A common application is growing systems, where 20G switches interconnect individual network segments.



### Typical Connection in MESH Topology

The switches support the RSTP / RSTP-M protocols.



## Technical Parameters

*compatibility*

	Parameter	Value	Unit	Note
Switching Capacity	Throughput	48	Gbps	
	Switching CPU	Marvell (USA)		
10 GBASE-R	Count	2		
	Supported Formats	Supports 64B/66B signal encoding		
1000 BASE-T	Connector	Slots SFP+		
	Count	8		FE
	Supported Formats	10/100/1000 BASE-T		
	Overvoltage Protection	30	A	8/20µs
	Connector	RJ45		
Management	SNMPv3	SIMULand		Windows Application
RS485/RS422 <sup>(1)</sup>	Count	2/1		
	Speed	Max. 57.6	kbps	
	Overvoltage Protection	30	A	8/20µs
Digital Inputs	Count	2		
	Mode	Digital - NC / NO		
		Analog 0 - 30kΩ for Balanced Loops		
Relay Output	Type of contact	1x Change-over		
	Max. Load	62.5VA (30W) / 1A / 60V		Resistive Load
Power Supply		Main input	Back-up input	
	Input Voltage	10 - 60 / 10 - 30	10 - 60	VDC/AC
	Power Consumption	Max. 10		W
	Overvoltage Protection	100	A	8/20µs
Environment	Operational Range	0...+70	°C	Temperature of Environment
	Storage Range	-40...+70	°C	
	Humidity	Max. 95	%	Non-condensing
	Weight	0.8	kg	
Planned Certification	CE, TUV			
The producer retains the right to change any technical parameters without previous written or published notification.				
<sup>(1)</sup> It is not possible to use both interfaces at the same time.				

## Overview of Supported Modes RS485

The table below lists the most commonly used modes / protocols recommended for deployment on new systems.

		B U S 2					
		ASSET	DOMINUS	GALAXY	MODBUS	RS485	NOTE
B U S 1	ASSET	✓	×	×	✓	✓	I&HAS Fides
	DOMINUS	×	×	×	✓	✓	I&HAS Abbas
	GALAXY	×	×	×	✓	✓	I&HAS Honeywell
	MODBUS	✓	✓	✓	✓	✓	MODBUS ASCII/RTU
	RS485	✓	✓	✓	✓	✓	Type. 4-5ms Delay Between RS Ports

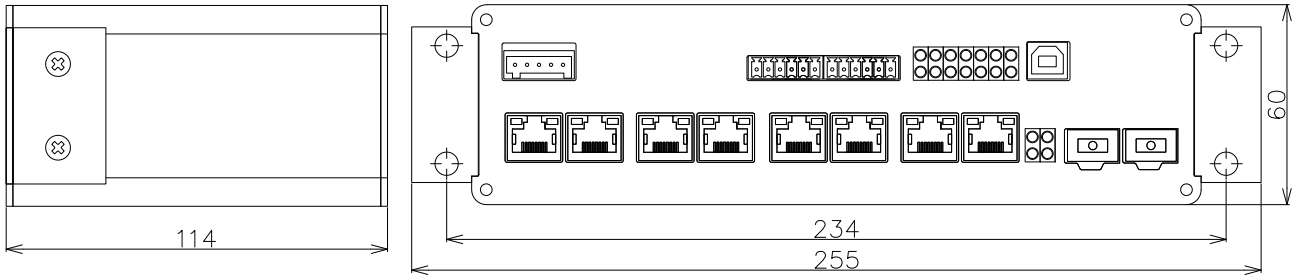
When transmitting data from I&HAS systems designed in accordance with EN 50131-1 the following rules apply:

- ❖ All frames are identified with VLAN headers in accordance with IEEE 802.1Q.
- ❖ All connected systems have a defined bandwidth (protection from DDoS attacks).
- ❖ Alarm system data have the QoS bits set for the highest priority.

The activity on all ports in the transmission system should be monitored via SNMP protocol.

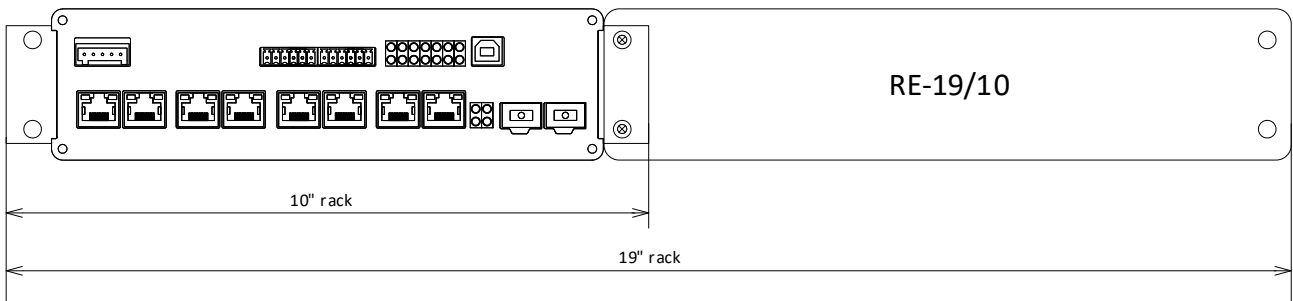
Dimensions of 20G-2X.8.0.F

universality



Mounting in the 10" and 19" rack

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Mounting to DIN35

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