

WATSON 5 ETHERNET

ETHERNET
IN YOUR FIRST MILE

Watson 5 Ethernet is a family of G.SHDSL modems designed for Ethernet transport. High throughput, high flexibility and advanced functionality make Watson 5 Ethernet the right choice for demanding applications.

Watson 5 Ethernet is available as plug-in card for a 19" subrack with 4 DSL pairs per card and as tabletop customer premises equipment with 1 or 2 DSL pairs.

The Watson 5 Ethernet plug-in card supports the new G.SHDSL.bis standard with symmetrical data rates up to 5.7Mbit/s per copper pair. Payload rates of up to 22.8 Mbit/s are possible with pair bonding over all 4 DSL pairs. The modem has built-in VLAN switching and Class of Service functions for traffic management and provisioning of differentiated services. The plug-in card is designed for rack-based installations. A tabletop housing is available to install the card at customer premises.

The Watson 5 Ethernet tabletop modem features single and two pair operation with payload rates up to 4.6 Mbit/s. It is VLAN transparent and ideally suited for business services such as corporate Ethernet-based private networks.

Management of Watson 5 Ethernet is fully SNMP compatible. Watson 5 Ethernet is supported by Schmid's industry-leading DSL management system, the Watson Element Manager WEM-2.

Performance, flexibility and reliability make Watson 5 Ethernet an important part of your transition to a next generation network. All backed by Swiss quality and by worldwide service and support to bring you **freedom of communication.**



FREEDOM OF COMMUNICATION

TECHNICAL SPECIFICATIONS

DSL Interface

SZ.866.V654: 4 x DSL G.SHDSL.bis (TC-PAM 32) 1/2/4 pair operation
 SZ.846.V450: 2 x DSL G.SHDSL (TC-PAM 16) 1/2 pair operation
 SZ.846.V350: 1 x DSL G.SHDSL (TC-PAM 16)
 ITU-T G.991.2 (2004), ETSI TS 101 524 (2005)
 192 kbps – 2.3 Mbps per pair (SZ.846.V350/450)
 192 kbps – 5.7 Mbps per pair (SZ.866.V654)
 Line impedance 135 Ω
 Transmit power up to 16 dBm
 Connector RJ-45 8 pin

Ethernet Interface

Single Ethernet Interface (SZ.846.V350/450)
 4 x Ethernet Interface (SZ.866.V654)
 10/100 Mbps half/full duplex, Auto-Sensing, Auto-Crossover
 IEEE 802.3 Ethernet
 IEEE 802.1P/Q VLAN transparency (SZ.846.V350/450)
 IEEE 802.1P/Q VLAN tagging (SZ.866.V654)

Class of Service (SZ.866.V654)

4 classes of service
 4 queues, weighted fair queuing
 Layer 2 or Layer 3 classification
 Configurable rate limiters

Management and Configuration (SZ.866.V654)

Local management: RS-232 (VT-100)
 Remote management: SNMP, Telnet
 Dedicated Ethernet management interface
 In-band management through VLAN
 Built-in extensible SNMP agent (RFC 1157, RFC 2741)
 MIBs: RFC 1213, RFC 1493, RFC 2674, RFC 2737, RFC 2863,
 RFC 2819, RFC 3276, RFC 3635, RFC 3636.
 Vendor-specific Schmid HDLSL MIB
 Supported by WEM-2

Management and Configuration (SZ.846.V350/450)

Local Management: RS-232 (VT-100)
 Remote management: SNMP, Telnet
 Supported by WEM-2

Dimensions and Weight

SZ.846.V350/V450 (Tabletop): 220 x 43 x 195 mm, 1 kg

Environmental Conditions

Operating temperature –5° to +60°C
 Power Supply –40 to –72 VDC
 Humidity 5% to 95% R.H.
 Safety EN 60950
 EMC EN 55022, EN 55024
 Overvoltage ITU-T K.20 (SZ.866.V654)
 ITU-T K.21 (SZ.846.V350/450)

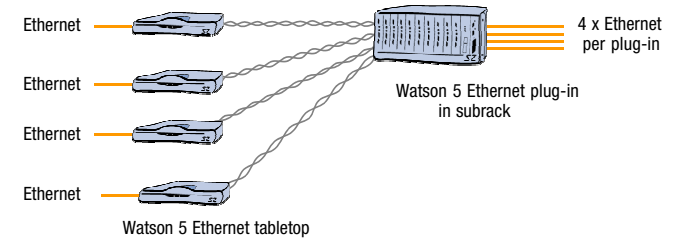
Transport configurations

		Customer Premises		
		Ethernet plug-in SZ866.V654	Ethernet tabletop SZ.846.V350	Ethernet tabletop SZ.846.V450
Central Office	Ethernet plug-in	Pairs 1 – 4	1	1 – 2
	SZ866.V654	Throughput 22.8 Mbit/s	2.3 Mbit/s	4.6 Mbit/s
	nx64 plug-in*	Pairs 1 – 2	1	1 – 2
		Throughput 4.6 Mbit/s	2.3 Mbit/s	4.6 Mbit/s
	E1 plug-in*	Pairs 1 – 4	1	1 – 2
		Throughput 2 Mbit/s	2 Mbit/s	2 Mbit/s

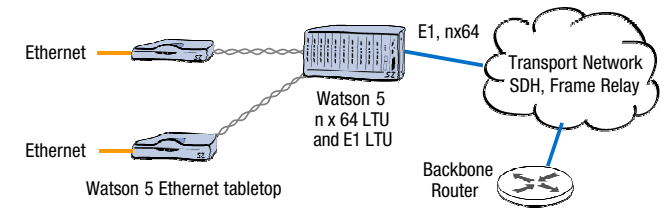
* Cf. Watson 5 Datasheets

Ordering Information

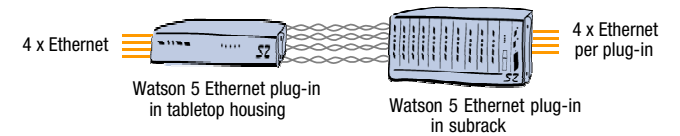
SZ.846.V350 W5 NTU Ethernet, single link 1p, Tabletop
 SZ.846.V450 W5 NTU Ethernet, single link 2p, Tabletop
 SZ.866.V654 W5 LTU, 4 x Ethernet, 4 x DSL, Plug-in
 SZ.875.V100 Tabletop housing for Watson plug-in (DC Power)
 SZ.875.V110 Tabletop housing for Watson plug-in (AC+DC Power)



Transparent Ethernet Service with Watson 5 Ethernet



Ethernet transport over a WAN with Watson 5 Ethernet



22.8 Mbps Fiber replacement with Watson 5 Ethernet