

Industrial ADSL/VDSL Router BRD-355A and BRD-355B

- **Industrial remote access using the Internet**
 - MCT (SIN-498)-PASS and SoGEA compliant
 - Fixed line broadband connection via ADSL or VDSL2
 - Support for ADSL Annex J and VDSL2 vectoring
 - Access SCADA systems, HMIs, sensors and PLCs remotely
- **Designed for industrial applications**
 - 35 mm DIN-rail mounting
 - Wide power input range, 10 to 60 VDC
 - Wide operating temperature range (-25 to +70°C)
 - High MTBF MIL-217F 955.000 hours
- **Secured resilient Internet access**
 - Cybersecurity toolbox including firewall, DoS prevention
 - Full integration with WeConnect Remote access solution
- **Legacy Serial to IP support**
 - Replacement for analogue leased lines modems
 - Serial protocols to IP conversion



Remote access removes boundaries, eliminates the need for time consuming site visits and provides a network infrastructure suitable for today's "always on"-society. The BRD-355 industrial ADSL/VDSL router uses the Internet to connect remote networks. Allowing IP enabled SCADA, HMI, PLCs, sensors or legacy serial devices etc. to communicate with each other, a prerequisite for any Industrial Internet (IIoT/IoT) solution.

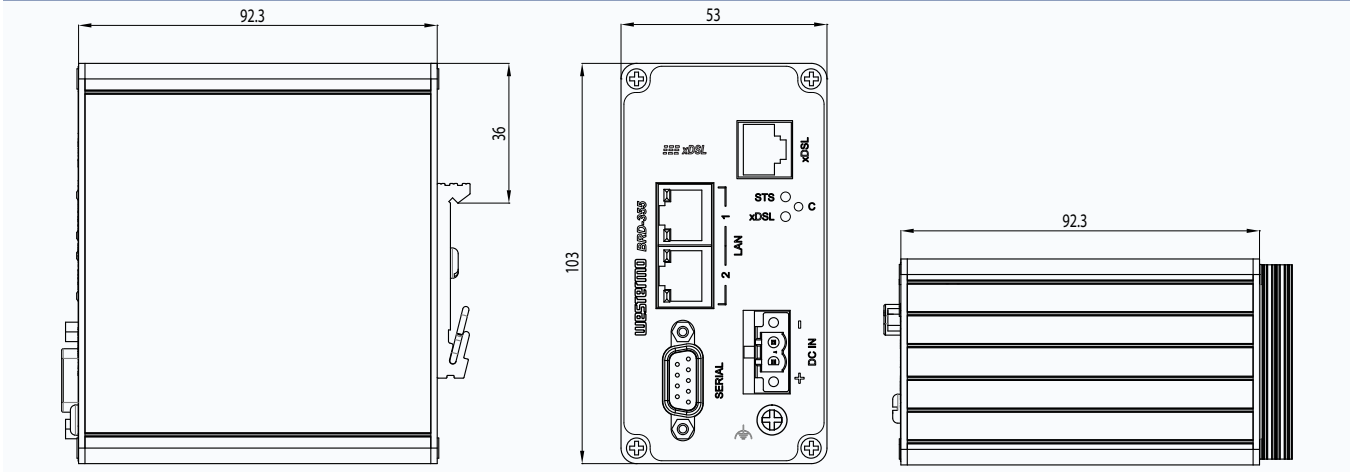
The BRD-355 has a built-in two port Ethernet switch and an RS-232-port, for both new and legacy modem replacement. Designed to be installed on a DIN rail all connectors and LEDs have been positioned on the front of the unit, for easy access and fast status feedback.

The cybersecurity features of the BRD-355 prevent unauthorized access and secure the communication for Internet-enabled applications. The easy-to-use firewall filters incoming and outgoing traffic, allowing only approved packets to pass through. The BRD supports a variety of VPN technologies to ensure that data can be sent over public or private networks securely via SSL (OpenVPN) or IPsec. The BRD-355 is fully integrated with the easy to use, Westermo WeConnect high security remote access solution.

Upgrading legacy serial or modem systems to IP-enabled, can prove both costly and time consuming. Therefore the BRD-355 includes a wide set of feature to allow the easy migration of the legacy serial/modem applications. The features include interpreting the ATD modem emulation, lease line over IP and multidrop application where a master is connected to multiple slave locations.

Specifications - BRD-355A and BRD-355B

Dimensional drawing



Housing

Dimensions (W x H x D)	53 x 103 x 92.3 mm (2.09 x 4.06 x 3.63 in)
Housing	Full metal
Weight	0.4 kg

Power parameters

Rated voltage	12 to 48 VDC
Operating voltage	10 to 60 VDC
Operational current	450 mA @ 12 VDC maximum
Rated current	1000 mA at 12 VDC
Isolation	Galvanic isolation to all ports

Environmental

Operating temperature	-40 to +70°C (-40 to +158°F)
Storage and transport temperatures	-50 to +85°C (-58 to +185°F)
Ingress protection	IP40
Humidity (operating)	0-90% relative humidity
MTBF MIL-HBDK-217F	995,000 hours

Interface

RS-232	1 x 9-pin D-sub, 300 bit/s - 115.2 kbit/s
Ethernet	2 x 10/100 Mbit/s, Ethernet TX, RJ-45
xDSL	1 x RJ-11, DSL line connection

xDSL protocols				
Technology	Annex/Profile	BRD-355A	BRD-355B	BRD-355A-AU
TI.413		◆		◆
ADSL	A	◆		◆
ADSL	B		◆	
G.Lite		◆		◆
ADSL2	A	◆		◆
ADSL2	B		◆	
ADSL2	J		◆	
ADSL2	L	◆		◆
ADSL2	M	◆		◆
ADSL2+	A	◆		◆
ADSL2+	B		◆	
ADSL2+	J		◆	
ADSL2+	M	◆		◆
VDSL2	8a, 8b, 8c, 8d	◆	◆	◆
VDSL2	12a, 12b	◆	◆	◆
VDSL2	17a	◆	◆	◆
VDSL2 Vectoring		◆	◆	◆

Approvals	
EMC	EN 55032, Electromagnetic compatibility of multimedia equipment - Emission Requirements EN 55035, Electromagnetic compatibility of multimedia equipment - Immunity Requirements, including its amendments A11:2019
Safety	EN 62368-1, Audio/video, information and communication technology equipment - Part 1: Safety requirements including its amendments Nos. A11:2020

Software	
Management guide	https://www.westermo.com/-/media/Files/User-guides/westermo_mg_6623-3210_brd-mrd.pdf
WeConfig	https://www.westermo.com/solutions/weconfig
WeConnect	https://www.westermo.com/solutions/weconnect

Warranty	
Validity	5 years

Ordering information	
Art. no.	Description
3623-0320	BRD-355A, Industrial ADSL/VDSL router
3623-0330	BRD-355B, Industrial ADSL/VDSL router
3623-0340	BRD-355A-AU, Industrial ADSL/VDSL router

Accessories	
3125-0150	PS-60, DIN-rail Power Supply

Specifications - BRD-355A and BRD-355B

Protocols and Functionality
Layer 2 Switching IEEE 802.1AB LLDP, IGMPv1/v2/v3 Snooping, MAC filters, independent port configuration
Layer 2 QoS IEEE 802.1p Class of Service with flexible classification (VLAN tag priority IP DSCP/ToS, Port ID), Ingress and Egress Rate limiting
IP Host Services Static IP Address, DHCP Client, DNS Client, DDNS, ZeroConf (mDNS), NTP Client (NTPv4), IP Interfaces (Ethernet, VLAN, Loopback, SSL, VPN, GRE)
Network Servers DHCP Server (including options 1, 3, 6, 42), DHCP Relay Agent, DNS Proxy Server (DNS forwarder and Host records)
Management Tools WeConfig, web interface (HTTP and HTTPS), Command Line Interface (CLI) via SSHv2 and Telnet, SNMPv1/v2c/v3, RFC5424/RFC3164 Syslog (log files and remote syslog server)
SNMP MIB Support (read-only) RFC 1213 MIB-2, RFC 2819 RMON MIB, RFC 2863 Interface MIB, RFC 3433 Entity Sensor MIB, RFC 3635 Ether-like Interface MIB, RFC 4133 Entity MIB, RFC 4188 Bridge MIB, RFC4363 Q-BRIDGE MIB, RFC 4836 MAU MIB, IEEE 802.1AB LLDP MIB, IEEE 802.1AX LAG MIB, RFC 2787 VRRPv2 MIB, RFC 6527 VRRPv3 MIB
IP Routing and VPN Static IP Routing, Proxy ARP, Dynamic IP routing (RIPv1/v2), VRRPv2/v3, Stateful Inspection Firewall, IP Masquerading (NAT/NAPT), Custom NAT, Port Forwarding, Stateless NAT (1-1 NAT), SSL VPN (Client), Certificate Authentication, Pre-shared Key (PSK), Layer-2 and Layer-3 VPN, address pool and address per CN, TLS authentication, Generic Routing Encapsulation (GRE), RADIUS, Simple Certificate Enrolment Protocol (SCEP), L2TP, PPTP, DoS Filters, Custom Filters
Serial Port Technologies RS-232, Serial Over IP (Serial Extender and Virtual Serial Port), Modem emulation and Phonebook, AT command interpreter, MODBUS RTU to MODBUS IP, Master to multiple slave serial mux, DNP3 serial to IP, SMS
xDSL Technologies RFC2684 Bridged LLC and Bridged VC-MUX ATM encap. (ADSL), TR-067 Compliance, Dying Gasp support, ITU K.21 Support, Rate adaptive modem at 32 Kbps steps, ATM Layer with traffic shaping QoS support (UBR, CBR, VBR-rt,VBR-nrt), AAL5 – AAL, F5 OAM Loopback/Send and receive, RFC2364 PPPoA client support, RFC2516 PPPoE client support, RFC2225 / RFC1577 Classical IP Support, PAP/CHAP/MS-CHAP for Password Authentication support