## Cisco HWIC-2SHDSL Datasheet



Cisco HWIC-2SHDSL 2-pair G.SHDSL HWIC HWIC-2SHDSL

Cisco HWIC-2SHDSL 2-pair G.SHDSL HWIC

The 2-pair (HWIC-2SHDSL) and 4-pair (HWIC-4SHDSL) symmetric high-bit-rate DSL high-speed WAN interface cards (HWICs) provide G.SHDSL connectivity to a Wide Area Network. The 4-pair symmetric G.SHDSL HWIC provides two ports of 4-wire or four ports of 2-wire connectivity options, whereas the 2-pair G.SHDSL HWIC provides two ports of 2-wire or one port of 4-wire connectivity options. The 4-pair symmetric G.SHDSL HWIC also allows bonding single or dual-pair G.SHDSL ports up to a single 8-wire interface with increased bandwidth by using Inverse Multiplexing over ATM (IMA) or data interleaving with M-pair mode. These cards are supported in all integrated services routers that have HWIC slots.

The 2-pair and 4-pair G.SHDSL HWICs supersede the existing G.SHDSL WAN Interface Card (part number WIC-1SHDSL-V3), which is a WIC-based G.SHDSL solution. The two new G.SHDSL HWICs provide higher performance and increased reach when compared to the G.SHDSL WIC.

G.SHDSL technology offers customers high-speed, symmetrical WAN connectivity at a lower monthly cost than traditional WAN circuits. The 2- and 4-pair G.SHDSL HWICs together with Cisco integrated services routers provide businesses the necessary bandwidth for critical traffic such as voice and video conferencing, and enable customers to save money by integrating voice and data traffic on the same WAN link. Service providers can increase subscriber revenue by bundling services and offering differentiated service levels through service-level agreements.

The first standardized multirate symmetric DSL, G.SHDSL has been an accepted worldwide technology standard based on ITU recommendation G.991.2. G.SHDSL is designed to transport rate-adaptive symmetrical data across a single

copper pair at data rates up to 2.304 Mbps for a single pair or up to 4.608 Mbps over two pairs. Later enhancements (Annexes F and G) to the G.991.2 specification allow for increased performance up to 5.696 Mbps over a single copper pair. IMA technology allows the 4-pair G.SHDSL HWIC to offer data rates up to 2.304 Mbps per pair and up to 9.2 Mbps over four pairs. These rates cover applications traditionally served by HDSL, SDSL, T1, E1, and services beyond E1. Refer to Table 2 for the data rates supported by the 2- and 4-pair G.SHDSL HWICs (HWIC-2SHDSL and HWIC-4SHDSL) under different configurations.

## Specifications

- Manufacturer: Cisco
- Product ID: HWIC-2SHDSL
- Product Description: 2-port G.shdsl HWIC
- Product Type: HWIC
- Application/Usage: Wide Area Network
- Interfaces/Ports: 1 x RJ-11 G.SHDSL WAN
- Connectivity Media: Copper G.SHDSL
- Data Transfer Rate: 4.61 Mbps G.SHDSL
- Digital Signaling Protocol: SHDSL
- Protocols & Specifications: ITU G.991.2 (G.shdsl)
- Temperature:
  - 32°F (0°C) to 104°F (40°C) Operating
  - -4°F (-20°C) to 149°F (65°C) Storage
- Humidity: 10% to 90% Non-condensing Relative Humidity
- Dimensions: 0.7" Height x 2.8" Width x 4.0" Depth
- Weight (Approximate): 3.52 oz

## Buy Now