



THE STS4-WBS IS THE RUGGEDIZED DEVICE THAT GENERATES THE WIRELESS LOCAL AREA NETWORK (WLAN) THAT IS THE HEART FOR OUR WIRELESS STS4 HARDWARE. THE STS4-WBS RELAYS ALL WIRELESS AND WIRED COMMUNICATIONS BETWEEN STS-LIVE RUNNING ON THE OPERATORS PC AND ALL OTHER STS4 COMPONENTS INCLUDING UP TO 128 STS4 NODES AND THE OPTIONAL AUTOMATIC LOAD POSITION TRACKER (ALPT). THE INTERNAL LI-ION BATTERY WILL POWER THE STS4-WBS UNIT FOR APPROXIMATELY 12 HOURS OF CONTINUOUS USE. THE UNIT IS TRIPOD-MOUNTED FOR EASY PLACEMENT BETWEEN THE PC AND THE STS4 NODES ATTACHED TO THE STRUCTURE.

FEATURES

- + Long-lasting, rechargeable Li-Ion battery
- + Water-resistant and ruggedized for use in adverse field environments
- + Tripod-mounted to allow for optimal field placement between PC and STS4 hardware
- + Broadcasts standard IEEE 802.11a/b/g wireless network and
- + Backup wired Ethernet (LAN) connection
- + Onboard wireless backhaul link (5.0 GHz) for wirelessly connecting multiple STS4-WBS units together to increase wireless network range
- + Manages up to 128 STS4 nodes

OPTIONS & ACCESSORIES

- + Internal radio options for the Automatic Load Position Tracker (ALPT) depending on the geographic location
- + Optional Local Area Network (LAN) switches for hardwiring STS4 Nodes when wireless is not an option
- + Long-range antenna for wirelessly connecting multiple STS4-WBS units separated by long distances

SPECIFICATIONS

MODEL	STS4-WBS-AC000	STS4-WBS-AC900	STS4-WBS-AC024
CONTROL UNIT ETHERNET COMMUNICATION			
AP	10/100 Base-T, +24 V _{dc} Proprietary (Passive) Power-Over-Ethernet (Connection to Access Point)		
POE	10/100 Base-T, +24 V _{dc} Proprietary (Passive) Power-Over-Ethernet (Alternative Connection)		
PC	10/100 Base-T (Connection to PC)		
CONTROL UNIT POWER			
LI-ION BATTERY	+10.8 V _{dc} (Nominal), 8.7 Ah, 93 Wh		
DC SUPPLY	+24 V _{dc} @ 2.0 Amp (max for charging)		
ACCESS POINT			
TYPE	Dual Band Wireless Access Point		
MODEL	ENS620EXT		
2.4 GHz WIRELESS	IEEE 802.11b/g/n, 27 dBm		
	Access Point Mode (wirelessly connect STS4 hardware and PC)		
5.0 GHz WIRELESS	IEEE 802.11a/n/ac, 27 dBm		
	Bridge Mode (wirelessly connect between multiple STS4-WBS)		
ANTENNAS	Four External 5 dBi Dual-Concurrent Omni-directional, SMA Connector		
ETHERNET (LAN) INTERFACE	2 x 10/100/1000 T-Base RJ45 Ports		
POWER SOURCE	+24 V _{dc} Proprietary (passive) Power-Over-Ethernet		
ALPT TRANSCEIVER			
RADIO FREQUENCY	n/a	900-928 MHz	2.400 - 2.483 GHz
TRANSMIT POWER	n/a	200 mW	10 mW
ANTENNA	n/a	2 dBi Omni Directional (RP-SMA Male)	5 dBi Omni Directional (SMA Male)
RANGE ¹	n/a	4 miles (6.5 km)	2.5 miles (4 km)
TYPICAL POWER CONSUMPTION			
BASE CONSUMPTION (NO AP OR ALPT)	1.5 W	1.7 W	1.6 W
BASE CONSUMPTION (AP CONNECTED)	5.1 W	5.4 W	5.2 W
TYPICAL POWER CONSUMPTION (AP + ALPT)	5.1 W	5.8 W	5.4 W
ESTIMATED OPERATING TIME ²	18 Hours	16 Hours	17 Hours
PHYSICAL			
CONTROL UNIT	Waterproof		
ACCESS POINT	IP55		
ASSEMBLED SIZE (W X L X H)	24 x 24 x 42 in (610 x 610 x 1220 mm)		
ASSEMBLED WEIGHT	10.5 lb (4.76 kg)		
TEMPERATURE			
OPERATING	-20 °C to +60 °C		
BATTERY CHARGING	0 °C to +40 °C		
STORAGE	-20 °C to +60 °C		
COMPLIANCE & WARRANTY			
LI-ION BATTERY	FCC Part 15 Class B, CE		
ACCESS POINT	FCC, CE		
ALPT TRANSCEIVER	n/a	FCC, IC, CE	FCC, IC, CE
WARRANTY	3 Years		

¹ Intelliducer connector required with STS Intelliducer data acquisition nodes.

² Temperature lower limit based the electronics, upper limit based on instrumentation cable. Call BDI for wider temperature range cable.
