Wireless Cards for 802.11p

Throughout this document, it will be explained what wireless cards work with the 802.11p standard (they have already tested) and which ones can support the WLANp standard (Not tested). It could be a complication to find the right wireless cards. Therefore, the aim of this document is shown other possibilities that do not have been tested. However, they should support WLANp, because at first sight they have the correct technical specifications.

All the wireless cards showed in Figure 1 have been tested and we have in Telemotive now:

Manufacturer	Model	Chipset	Integrator	Out power	Sensitivity	Datasheet	Buy
Atheros	HB92	AR9280	Dell U608F			Link	Amazon
Atheros	HB116	AR9382	Sparklan WPEA 121N	12dBm ± 2dBm	≤ 76dBm@54Mbps	Link	Sparklan
							Amazon
Atheros		AR9462	Sparklan WPEA-251N (BT)	11dBm ± 2dBm@54Mbps	≤ 73dBm@54Mbps	Link	Acalbfi (germany)
							Texim-europe

Figure 1. Working wireless cards

The wireless cards that are showed below, they meet the specifications set for 802.11p standard. However, they have not been tested.

Manufacturer	Model	Chipset	Integrator	Out power	Sensitivity	Datasheet	Shops
Atheros	HB112	AR9380-AL1A	Sparklan 128N	12dBm ± 2dBm@54Mbps	≤ 81dBm@54Mbps	Link	Sparklan
							Techship (Sweden)
							Acalbfi (Germany)
							Ebay (Germany)

Figure 2. Wireless cards without test

Conclusions

It has been shown that all the wireless cards which can work with WLANp are manufactured from SparkLan. Therefore, it is advisable to check the SparkLan official distributors.

Furthermore, it has been found a German Company which offers those wireless cards. It is called Atlantik Elektronik, as can be seen in *Technology: Wireless Connectivity -> WI-FI -> Wi-Fi Frontend Modules*. As is shown in the picture below, they have support for same half-size and full size wireless cards.

Wi-Fi - PCIe Frontend Modules

Product Family/Product	Supplier	Key Features	Additional Information
WPEA-350GNH	Sparklan	• 802.11b/g/n High-Power • Mini Card • Qualcomm Atheros AR9590-AR1A • 3T3R	Data Sheet Design-In Support
WPEA-128N	Sparklan	• 802.11a/b/g/n • Half Mini Card • Qualcomm Atheros AR9380-AL1A • 3T3R	Data Sheet Design-In Support
WPER-172GN	Sparklan	• 802.11b/g/n USB • Half Mini Card • MediaTek (Ralink) RT5390U • 1T2R • USB Interface on Mini-PCIe Edge Connector	Data Sheet Design-In Support
WPEA-251N(BT)	Sparklan	• 802.11a/b/g/n Wi-Fi + Bluetooth • Half Mini Card • Qualcomm Atheros AR9462 • 2T2R	Data Sheet Design-In Support
WPEA-152GN(BT)	Sparklan	• 802.11b/g/n Wi-Fi + Bluetooth • Half Mini Card • Qualcomm Atheros AR3012 + AR9485 • 1T1R	Data Sheet Design-In Support
WPEA-127NI	Sparklan	• 802.11a/b/g/n • Mini Card • Qualcomm Atheros AR9390-AL1B • 3T3R • Industrial temperature range: -40°C to 80°C	Data Sheet Design-In Support
WPEA-127N	Sparklan	• 802.11a/b/g/n • Mini Card • Qualcomm Atheros AR9380-AL1A • 3T3R	Data Sheet Design-In Support
WPEA-121N	Sparklan	• 802.11a/b/g/n • Half Mini Card • Qualcomm Atheros AR9382 • 2T2R	Data Sheet Design-In Support
WPEA-252NI	Sparklan	• 802.11a/b/g/n • Mini Card • Qualcomm Atheros AR9592-AR1B • 2T2R • Industrial termperaure range: -40°C to 85°C	Data Sheet Design-In Support
WPER-176AC	Sparklan	• 802.11ac/a/n • Mini Card • MediaTek MT7610E • 1T1R	Data Sheet Design-In Support
WPEA-351AC	Sparklan	• 802.11ac/a/n • Mini Card • Qualcomm Atheros QCA9880 • 3T3R	Data Sheet Design-In Support
WPET-232ACN	Sparklan	• 802.11ac/b/g/n • Mini Card • Realtek RTL8812AE • 2T2R	Data Sheet Design-In Support
WPEA-352ACN	Sparklan	• 802.11ac/b/g/n • Mini Card • Qualcomm Atheros QCA9880-BR4A • 3T3R	Data Sheet Design-In Support