

Data security is of the utmost importance to Heartland MicroPayments. Our priority is protecting your cardholder's data when designing all of our systems and installing them in your locations.

The WaveRider Laundry System is no exception. WaveRider uses secure 128 bit encryption when moving data among all of the devices in your laundry room and while transferring data to Heartland Payment Systems for processing with the issuing banks. At no time, is cardholder data stored within a laundry room nor is it transferred across an open communication line in plain or clear text. A diagram of the WaveRider Processing Path is shown in Figure 1, below.



Fig. 1 – WaveRider Processing Path

Data Security Review

The WaveRider system is among the leaders in data security. The system protects your data with AES128 encryption as it leaves the WaveReader traveling to the WaveController. After processing in the WaveController, the data is encrypted via TLS 1.2 for processing at Heartland and the issuing banks.

Compared with our competitors who rely on Windows PC's to provide processing and require memory and processing on board to accomplish transaction processing, Heartland's devices have no RAM and no processor for storing data. Thus our devices are inherently more secure – WaveRider simply can't store data past the length of the transaction which is the PCI rule.

There are devices in the laundry industry today that do not use data encryption when moving data within the devices in a laundry room. This not only puts the cardholder at risk but expose you as the merchant to risk for any theft or fraud from perpetrators who may install devices to steal data within the laundry room itself.

Heartland uses four separate layers of security to prevent data attacks:

Layer	Name	Description	Attack	Current Defense
1	User Swipes Card	User holds card and inserts it into the reader	Card Skimming	Physical layout of WaveReader makes card skimming hard and obvious.
2	Zigbee Network	Radio signals encrypted with AES 128. Uses Pre-Shared-Key	Zigbee radio sniffer	Attacker would have to know value of the PSK
3	Verizon / LAN Network	TLS 1.2 encrypted payload with Verizon network encryption applied	Listen to the Verizon network	Complexity of the double encryption precludes practical attack

In summary, the WaveRider system provides the type of data security Heartland customers have come to expect from one of the country's largest payment processors. No one is more invested in providing the best and most advance security possible than Heartland MicroPayments.

Our devices are fully PCI compliant and adhere to all standards provided by the PCI council.