ONLINE PIN

CARD MEMBER VERIFICATION FOR CHIP PAYMENTS

Online Personal Identification Number (PIN) validation is a Cardholder Verification Method (CVM) used to authenticate the Card Member at the Point of Sale (POS).

Issuers and Acquirers can use Online PIN as an acceptable CVM to complete a card-present EMV® chip transaction or an Expresspay contactless transaction.

Effective April 2015, American Express announced the availability of an Online PIN Network feature for AEIPS and Expresspay transactions.

Online PIN is an optional feature and may not be supported across all Acquirers or their Merchants. In some designated countries, American Express mandates the use of Online PIN. Please refer to your American Express Representative for more information on mandated countries.

How Online PIN Works

Online PIN works by sending the Issuer an online authorization message, which carries PIN data entered by the Card Member at the Point of Sale.

1. The Card Member conducts a transaction at a Merchant and enters their Personal Identification Number (PIN) to verify the transaction.

2. The certified Acquirer forwards the encrypted PIN to the Network via the Point-of-Sale authorization request message.

3. The Network decrypts the PIN using the encryption key shared with the Acquirer.

4. The Network re-encrypts the PIN using the encryption key shared with the Issuer and forwards the authorization request message to the Issuer.

5. The Issuer decrypts and verifies the PIN and returns an authorization response message based on the accuracy of the entered PIN and other Issuer decision criteria.

6. The authorization response message is forwarded by the Network back to the Merchant, via the Acquirer.
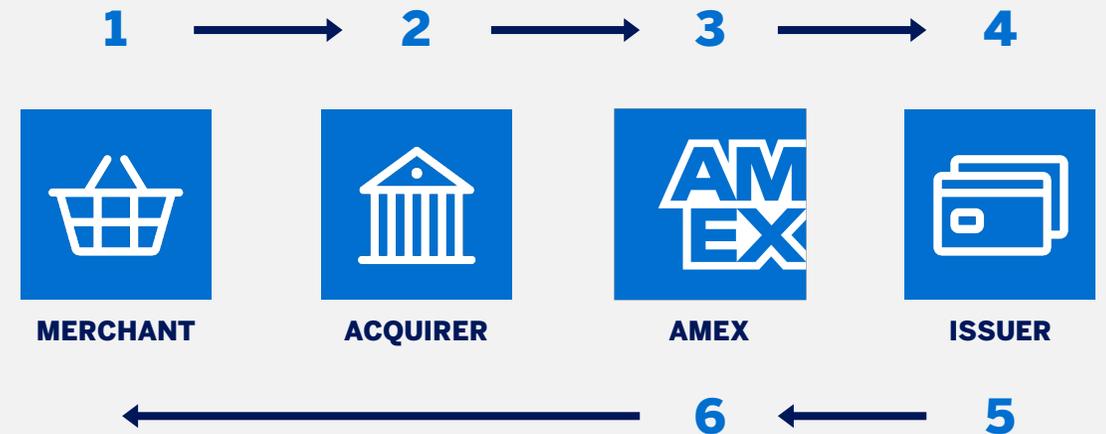
Implementation and Investment Considerations

To enable Acquirers and Issuers to leverage Online PIN for chip payments, the *American Express Network Specifications* **and** *Business Operational Policies* **define requirements for implementation.**

ACQUIRER IMPLEMENTATION

- Must have exchanged PIN keys with AEGNS

- Must be certified to accept PIN on the POS Authorization Request (1100) message

- Must be able to accept PIN-specific action codes on the POS Authorization Response (1110) message from the Issuer

- Must be able to adhere to key management procedures as listed in the *American Express Network Specifications*

- Must complete certification for Online PIN

INVESTMENT COMPONENTS*

- System upgrade and terminal updates

- Certification

- PIN management systems

ISSUER IMPLEMENTATION

- Must have exchanged PIN keys with AEGNS

- Must be certified to receive PIN on the POS Authorization Request (1100) message

- Must be able to send PIN-specific action codes on the POS Authorization Response (1110) message

- Must be able to adhere to Online PIN-related requirements as defined in the *Business and Operational Policies* (BOP)

- Must be able to adhere to key management procedures as listed in the *American Express Network Specifications*

- Must complete certification for Online PIN

INVESTMENT COMPONENTS*

- System upgrade

- Certification

*Precise costs will depend on a number of factors.