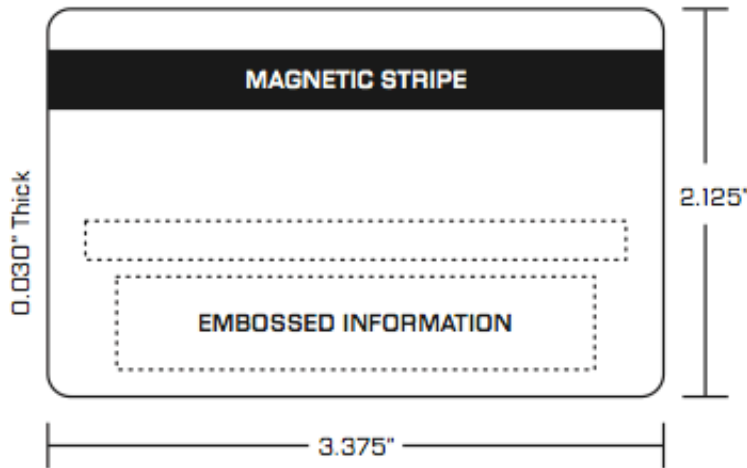


Dimensions - Financial Transaction Cards



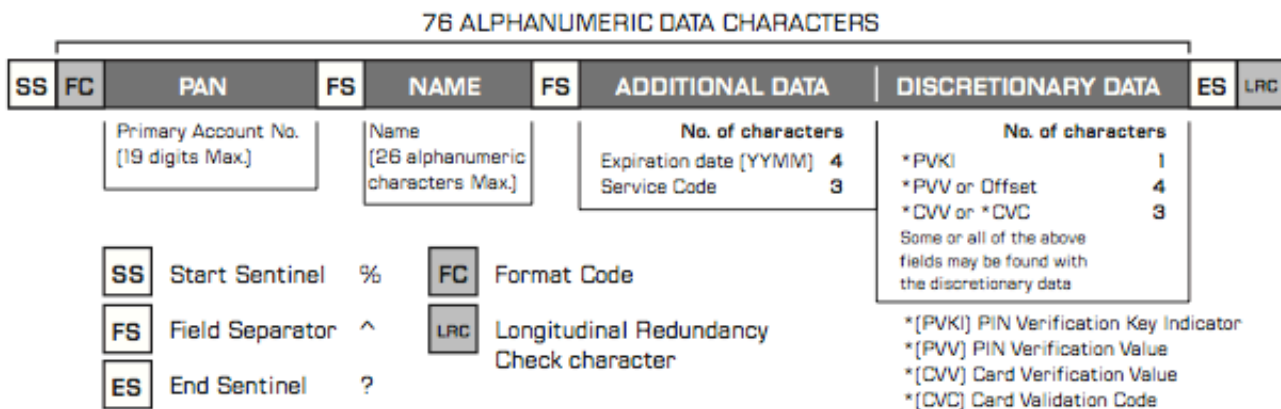
ISO	
7810	Physical characteristics of credit card size document
7811-1	Embossing
7811-2	Magnetic stripe - low coercivity
7811-3	Location of embossed characters
7811-4	Location of tracks 1 & 2
7811-5	Location of track 3
7811-6	Magnetic stripe - high coercivity
7813	Financial transaction cards

For copies of specifications contact:
 American National Standards Institute
 11 W. 42nd Street, New York, NY 10036
 212-642-4900

Magnetic Stripe Encoding - Financial Transaction Cards

Track	Recording Density (bits per inch)	Character Configuration (including parity bit)	Information Content (including control characters)
0.110" 1 IATA	210	7 bits per character	79 alphanumeric characters
0.110" 2 ABA	75	5 bits per character	40 numeric characters
0.110" 3 THRIFT	210	5 bits per character	107 numeric characters

Card Data Format - Track 1



Card Data Format - Track 2

37 NUMERIC DATA CHARACTERS

SS	PAN	FS	ADDITIONAL DATA	DISCRETIONARY DATA	ES	LRC																
Primary Account No. [19 digits Max.]		<table border="1"> <tr><th colspan="2">No. of characters</th></tr> <tr><td>Expiration date (YYMM)</td><td>4</td></tr> <tr><td>Service Code</td><td>3</td></tr> </table>		No. of characters		Expiration date (YYMM)	4	Service Code	3	<table border="1"> <tr><th colspan="2">No. of characters</th></tr> <tr><td>*PVKI</td><td>1</td></tr> <tr><td>*PVV or Offset</td><td>4</td></tr> <tr><td>*CVV or *CVC</td><td>3</td></tr> <tr><td colspan="2">Some or all of the above fields may be found with the discretionary data</td></tr> </table>			No. of characters		*PVKI	1	*PVV or Offset	4	*CVV or *CVC	3	Some or all of the above fields may be found with the discretionary data	
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Some or all of the above fields may be found with the discretionary data																						

SS	Start Sentinel	Hex B	:	LRC	Longitudinal Redundancy
FS	Field Separator	Hex D	=		Check character
ES	End Sentinel	Hex F	?		

*White boxes identify control characters

Card Data Format - Track 3 (ISO 4909)

104 NUMERIC DATA CHARACTERS

SS	FC	PAN	FS	USE AND SECURITY DATA	ADDITIONAL DATA	ES	LRC																																														
		Primary Account No. [19 digits Max.]	<table border="1"> <tr><th colspan="2">No. of characters</th></tr> <tr><td>Country Code (optional)</td><td>3</td></tr> <tr><td>Currency Code</td><td>3</td></tr> <tr><td>Currency Exponent</td><td>1</td></tr> <tr><td>Amount Authorized per Cycle</td><td>4</td></tr> <tr><td>Amount Remaining this Cycle</td><td>4</td></tr> <tr><td>Cycle Begin (Validity Date)</td><td>4</td></tr> <tr><td>Cycle Length</td><td>2</td></tr> <tr><td>Retry Count</td><td>1</td></tr> <tr><td>PIN Control Parameters (optional)</td><td>6</td></tr> <tr><td>Interchange Controls</td><td>1</td></tr> <tr><td>PAN Service Restriction</td><td>2</td></tr> <tr><td>SAN-1 Service Restriction</td><td>2</td></tr> <tr><td>SAN-2 Service Restriction</td><td>2</td></tr> <tr><td>Expiration Date (optional)</td><td>4</td></tr> <tr><td>Card Sequence Number</td><td>1</td></tr> <tr><td>Card Security Number (optional)</td><td>9</td></tr> </table>		No. of characters		Country Code (optional)	3	Currency Code	3	Currency Exponent	1	Amount Authorized per Cycle	4	Amount Remaining this Cycle	4	Cycle Begin (Validity Date)	4	Cycle Length	2	Retry Count	1	PIN Control Parameters (optional)	6	Interchange Controls	1	PAN Service Restriction	2	SAN-1 Service Restriction	2	SAN-2 Service Restriction	2	Expiration Date (optional)	4	Card Sequence Number	1	Card Security Number (optional)	9	<table border="1"> <tr><th colspan="2">No. of characters</th></tr> <tr><td>First subsidiary Account No. (optional)</td><td></td></tr> <tr><td>Secondary Subsidiary Account No. (optional)</td><td></td></tr> <tr><td>Relay Marker</td><td>1</td></tr> <tr><td>Cryptographic Check Digits (optional)</td><td>6</td></tr> <tr><td>Discretionary Data</td><td></td></tr> </table>			No. of characters		First subsidiary Account No. (optional)		Secondary Subsidiary Account No. (optional)		Relay Marker	1	Cryptographic Check Digits (optional)	6	Discretionary Data	
No. of characters																																																					
Country Code (optional)	3																																																				
Currency Code	3																																																				
Currency Exponent	1																																																				
Amount Authorized per Cycle	4																																																				
Amount Remaining this Cycle	4																																																				
Cycle Begin (Validity Date)	4																																																				
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*A Field Separator (FS) must be used if an optional field is not used

SS	Start Sentinel	Hex B	:	FC	Format Code (2 digits)
FS	Field Separator	Hex D	=	LRC	Longitudinal Redundancy
ES	End Sentinel	Hex F	?		Check character

*White boxes identify control characters

CORE
Recommends:

MagTek® Inc.
1710 Apollo Court
Seal Beach, CA 90740
p 562-546-6400
f 562-546-6301

The track formats used in this document are based on ISO Standards, however, other formats may be used. Contact your card issuer for your exact requirements