



Tachograph Cards Test Solutions



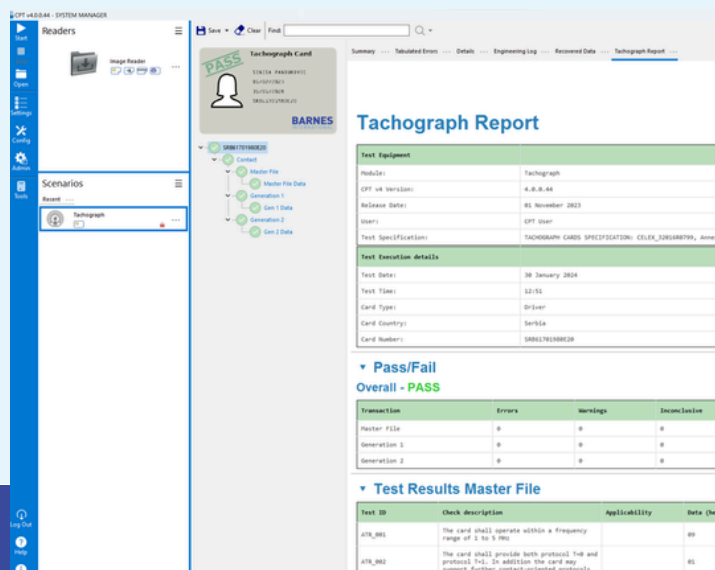
Speeds up Tachograph Card Testing and reduces the high cost and delay associated with failures

The device uses a software application solution for the checking of Tachograph cards. The test tool device can be utilised by both Engineers in initial Tachograph Product Development and by Operators in the process of regular Tachograph Card Production for Quality Control.

Testing EF files across the Masterfile, Generation 1 & Generation 2 applications are both included in accordance with regulatory requirements.

The device must support the control of new generation tachograph cards described in the document "COMMISSION IMPLEMENTING REGULATION (EU) 2016/799 of 18 March 2016".

PCSC card reader interface: Contact chip (ISO 7816, Class A, B, C, Protocol T=0, T=1) 1 full size card slot 5v 3v 1.8v Host Interface: USB
CCID Power Source: USB Port



Transaction	Errors	Warnings	Discard Lines
Master File	0	0	0
Generation 1	0	0	0
Generation 2	0	0	0

Test ID	Check description	Applicability	Data (hex)
ATK_001	The card shall operate within a frequency range of 1 to 9 Mhz		00
ATK_002	The card shall provide both protocol T=0 and protocol T=1. In addition the card may contain further contact-activated protocols		01

SUPPORTED

Comission
Implementing
Regulation (EU)
2016/799
18 March 2016



Solution Overview



A test tool created for Tachograph cards which are contact only ISO7816 specification. We utilise a PCSC reader and our custom design and built software.

The tool allows testing of 4 different card types, Drive, Workshop, Control and Company. Testing includes the checking of Elementary files for presence, length and value along with cryptographic functionality.



THE BARNES ADVANTAGE

Barnes is the chosen test tool of Banks & Issuers, Card Manufacturers, Personalisation Bureaus and Test Laboratories worldwide.

BUSINESS AGILITY

Barnes test tools are easy to use by both technical and non-technical users, and speed up card development and payment scheme certification.

COST ELIMINATION

The high business costs and wasted resources of producing and issuing invalid cards are eliminated.

RISK REDUCTION

The reputational risk of issuing invalid EMV cards to end customers is reduced.

FUTURE PROOFED

Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly makes updated test script packs available to customers via the Barnes website.

SERVICE EXCELLENCE


Our clients have every confidence that, whatever their test requirement, the Barnes team is always on-hand to deliver expert advice and fast support.



Tabs provide access to [Details Tree](#), [Engineering Log](#) and [Test Report](#). The detailed Results Tree and Engineering Log enable analysis and clear guidance for all levels of user.

Details Tree

Engineering Log

A full [Test Report](#) detailing the tests carried out and more in-depth detail on the errors, plus a list of all the tests performed. 

Tachograph Report

Test Equipment	Value
Modules	Tachograph
UPI V4 Version	4.0.0-44
Release Date	01 November 2023
User	OPT User
Test Specification	TACHOGRAPH CARDS SPECIFICATION: CELEX_308168799, Annex IC

Transaction	Errors	Warnings	Inconclusive	Not Applicable	Passes
Master File	0	0	0	0	27
Generation 1	1	0	0	104	54
Generation 2	0	0	0	97	65

Test ID	Check description	Applicability	Data (hex)	Outcome
ATR_001	The card shall operate within a frequency range of 1 to 5 MHz		09	Pass
ATR_002	The card shall provide both protocol T=0 and protocol T=1. In addition the card may support further contact-oriented protocols		01	Pass
ATR_003	Devices shall support direct convention in both protocols: the direct convention is		10	Pass

Instant Result Summary

Instant Result Summary showing a PASS, or in the case of FAIL, the Error Codes and Comments on the Tachograph card Tests which caused the failure. Test ID file name is created.