

# Dried Blood Spots<sup>™</sup>

## Product Brief

### At-a-Glance

A wide range of platforms & solutions from sample collection up to MS/LC

Unique pre-etched DMPK cards to collect the entire sample

Support legacy punched techniques with manual and automated platforms

Methods for GLP and 'Chain of Custody' built in

Engineering support services to implement your entire work-flow

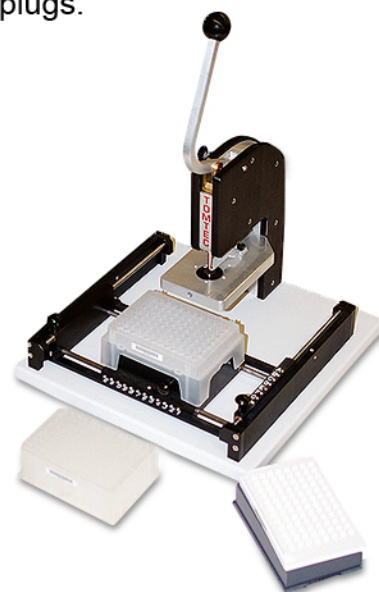
Since the fall of 2009 Tomtec Life Science has taken a leadership role in advancing the art of dried blood spots (DBS) bio-sampling focused on the preclinical and clinical markets. We offer a wide range of solutions supporting the entire workflow from sample collection, harvesting, storing to eluting. All current technology is based on the Whatman FTA DMPK cotton Cards.

### Manual DBS Bio-Sampling punch

This affordable instrument is designed to accelerate and ease the manual extraction of DBS plugs. Simply place and align the DBS card under the punch-head and transferred the plug to the target assay. The unit support different height 96-well assays with a positive index positioning carriage, so the target well is centered under the extraction head. The manual DBS punch improves alignment while virtually eliminating the physical overhead for punching out either 3mm or 5mm plugs.

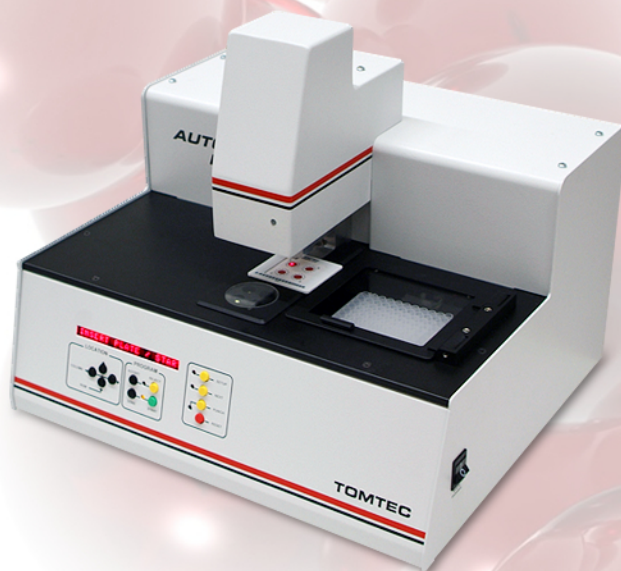
### DBS collection cards

Tomtec offers four cards of varying thickness, DMPK 200, 300, 400, and our new PDBS-7. Each card is bar-coded for GLP and encapsulated in a 2 $\frac{3}{4}$ " x 2 $\frac{1}{2}$ " x 0.30" thick White opaque styrene ring. The 1 $\frac{3}{4}$ " x 1 $\frac{3}{4}$ " collection area can be laser marked with a customer specified collection targets, nomenclature and branding. Tomtec also offers a variety of 6mm through-etched targets which can be punched directly into an assay well for elution; enabling collection and elution of the entire sample.



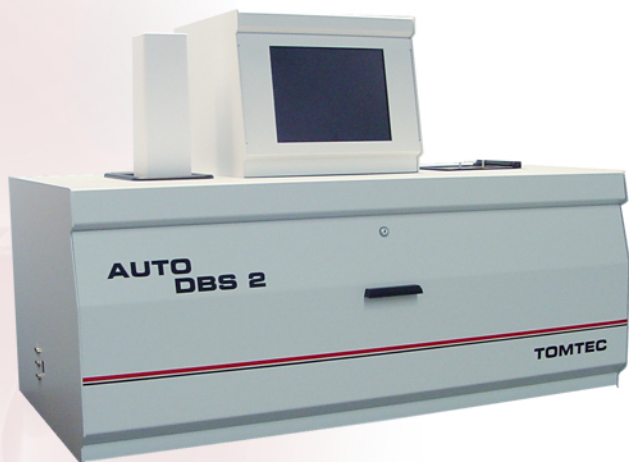
### **AutoDBS-1**

The AutoDBS-1 is the first in a line of low cost DBS bio-sampling instrument, designed to automate the extraction of blood components from a Tomtec or third-party DMPK card via a 3 or 5 mm punch head. This semi-automatic instrument interfaces with LIMS to provide GLP and 'Chain-of-custody' for extracted plugs as they are transferred to 96 well assays. The user positions the DBS targeted spot under a set of illuminated cross-hairs and actuates the plunger which transfers the extracted plug to the target assay well.



### **AutoDBS-2**

The AutoDBS-2 platform leverages Tomtec's 40 year legacy knowledge in Laboratory Automation to deliver a fully automatic solution which can harvest and transfer high quality DBS plugs to 96-well assays with full walk-away automation. Bar-coded Tomtec DMPK cards are pre-loaded in a cassette tower. These cards are then in-fed into the instrument, bar-code scanned, positioned and punched into a 96-well assay. Two cameras with their own software controlled lighting system are used to read and map the blood spot from the front and back of the card. This is done to determine the optimal punch coordinates for extraction. Each extracted plug is logged for GLP and 'Chain-of-custody'.



### **AutoDBS-3**

The AutoDBS-3 is the first in a line of next generation instruments that are designed to take advantage of the through-etched DMPK cards. The AutoDBS-3 is a proof of concept platform that allows users to deploy a full GLP workflow for DBS-bio sampling leveraging the Tomtec family of through-etched DMPK cards. This semi-manual instrument works in conjunction with a MS Excel driven application running on a connected Windows based personal computer.

