

## Technical Note 997-103\_TN006\_090130

**OmniPro-Accept** 

Module: File import/export

## **OmniPro-Accept ASCII Format**

## Description

This document describes the ASCII file format for files generated with the OmniPro-Accept software. Following typographic conventions are used in the syntax column of tables below:

Space character (ASCII character # 32)

[tab] ASCII character # 9

Nbrofcurves Name of variable length character string

Each line will start with a character coding the type of information in that line:

- ':' Information on number of measurements dumped; separators between individual measurements.
- '#' Comments line. This sign could also appear anywhere inside another line and marks the rest of the line as comments.
- '%' Label information line. The sign is immediately followed by a three letter code (for type of information) and then, depending on this code, the information in question. (The coding is specific for each kind of information.)
- '!' Operator comments.
- '=' A measurement point.

Every line of the output is terminated with <code>[CR][LF]</code>.

The output is divided into blocks. First is the header block: (Space character is denoted by an ' · ' character)

Line	Syntax	Comment
	measurement·in·file	NbrOfCurves determines the number of curves in the file and thus how many data blocks there will be in the dump.
ii	:SYS·BDS·0·#·Beam·Data·Scanner·Syste m	-

Then there is one block of curve data for each curve.

Line	Syntax	Comment
1	#	
2	#·RFA300·ASCII·Measurement·Dump·(·B	
	DS·format·)	
3	#	
4	#·Measurement·number·[tab] <i>Nbr</i>	Nbr = order number of the curve
5	#	
6	%VNR·1.0	Indicates the format version of ASCII dumps.

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7	OMOD. [+ab] Mada	14 1 - identifies how the sum of the sum of
7	%MOD·[tab] <i>Mode</i>	Mode = identifies how the curve was measured.
		Possible values are:
		'FLM·' (Film)
		'RAT·' (Ratio (RelativeDose))
		'ABS·' (AbsoluteDose)
		'INT·' (Integrated)
		'UDF·' (Undefined/Isodose)
		1.1
8	%TYP·[tab] <i>Type</i>	Type = identifies type of curve. Possible values are:
		'SCN·' (Scan)
		'ISO.' (Isodose)
		'UDF·' (Undefined)
9	%SCN·[tab] <i>ScanType</i>	ScanType = identifies type of scan. Possible values
	21	are:
		'DPT·' (DepthDose)
		'PRO' (Profile)
		'MTX·' (Matrix)
		'DIA·' (Diagonal)
		'UDF·' (Undefined/Isodose)
10	QEID. [+ab] Dotactor Turno	
10	%FLD·[tab] <i>DetectorType</i>	Possible values of DetectorType are:
		'ION·' (lonChamber)
		'SEM·' (Semiconductor)
		'UDF·' (Undefined)
11	%DAT·[tab] <i>DateOfCreation</i>	DateOfCreation = 'MM-DD-YYYY'
12	%TIM·[tab] <i>TimeOfCreation</i>	<pre>TimeOfCreation = 'HH:MM:SS'</pre>
13	%FSZ·[tab] <i>FieldWidth</i> [tab] <i>FieldHeigi</i>	FieldWidth <b>and</b> FieldHeight <b>in mm</b>
14	t %BMT·[tab] <i>RadType</i> [tab] <i>Energy</i>	Possible values of RadType are:
'-	oblir [cas]Radrype[cas]Energy	COB· (Cobalt)
		,
		'PHO·' (Photons)
		'ELE·' (Electrons)
		'UDF·' (Undefined)
		Energy is a right-justified, seven-character string with
		energy value in MV or MeV always with one decimal.
L		Example: '···26.5'
	%SSD·[tab] <i>SSD</i>	SSD in mm
16	%BUP·[tab] <i>BuildUp</i>	BuildUp in 0.1 mm
17	%BRD·[tab] <i>BeamReferenceDist</i>	BeamReferenceDist in mm
18	%FSH·[tab] <i>Shape</i>	Shape = the field shape. Possible values are:
		'-1' (Undefined)
		'0' (Circular)
		'1' (Rectangular)
		'2' (Irregular)
19	%ASC·[tab] <i>AccessoryNbr</i>	Accessory number
20	%WEG·[tab] WedgeNbr	Wedge number (angle)
21	%GPO·[tab] GantryAngle	GantryAngle in degrees
22	%CPO·[tab] CollimatorAngle	CollimatorAngle in degrees
	OCTO [CON] COTTTING COTATIGLE	COTITING COTATION E III ACOLECO

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23	%MEA·[tab] <i>MeasurementType</i>	Possible values of MeasurementType are: '-1' (Undefined) '0' (Absolute dose) '1' (Open depth) '2' (Open profile) '4' (Wedge) '5' (Wedge depth) '6' (Wedge profile)
24	%PRD·[tab] <i>ProfileDepth</i>	ProfileDepth in 0.1 mm
25	%PTS·[tab] <i>NbrOfPoints</i>	NbrOfPoints = number of curve data points
26	%STS·[tab] StartX[tab] StartY[tab] StartZ·#·Start·Scan·values·in·mm·(·X·,·Y·,·Z·)	StartX, StartY and StartZ are right-justified, seven-character strings with start values for each axis in origin-relative coordinates, in mm and always with one decimal. Example: ' · -100.0'.
27	<pre>%EDS · [tab] EndX[tab] EndY[tab] EndZ · # · End · Scan · values · in · mm · (·X · , ·Y · , ·Z · )</pre>	$EndX$ , $EndY$ and $EndZ$ are right-justified, seven-character strings with end values for each axis in origin-relative coordinates, in mm and always with one decimal. Example: ' $\cdot\cdot$ 100.0'.
28	!·CommentsLine1	Operator comments, sixty characters long.
29	!·CommentsLine2	Operator comments, sixty characters long.
30	#	
	#[tab]··X·····Y·····Z····Dose	
32	#	
33	ose	XPOS, YPOS and ZPOS are right-justified, seven-character strings with origin-relative coordinates of the data point, in mm and always with one decimal. Example: '···10.0'. Dose is also a right-justified, seven-character string but with the normalized dose value of the data point, in percent and always with one decimal. This field is repeated for every curve data point.
_	: FOM # . FUG. OI. Measurement	-

The last block indicates the end of file.

	Line	Syntax	Comment
Ī	1	:EOF·#·End·of·File	Indicates the end of file.

## **Example**

This is an example of a depth dose measurement, made with an ion chamber, in a 100x100 mm 6 MV photon field. SSD is 1000 mm. The ASCII output was made using version 4.3 of the RFA-300 software.

```
:MSR.[tab]1[tab].#.No..of.measurement.in.file
:SYS.BDS.0.#.Beam.Data.Scanner.system
#
#.RFA300.ASCII Measurement.Dump.(.BDS.format.)
#
#.Measurement.number.[tab]1
#
%VNR.1.0
%MOD.[tab]RAT
%TYP.[tab]SCN
%SCN.[tab]DPT
%FLD.[tab]ION
```

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```
%DAT · [tab] 02-03-1988
%TIM • [tab] 14:15:25
%FSZ • [tab] 100 [tab] 100
%BMT · [tab] PHO · [tab] · · · · 6.0
%SSD • [tab] 1000
%BUP·[tab]13
%BRD · [tab] 0
%FSH · [tab] 1
%ASC • [tab] 0
%WEG · [tab] 0
%GPO·[tab]0
%CPO · [tab] 0
%MEA · [tab] 1
%PRD • [tab] 0
%PTS · [tab] 25
STS \cdot [tab] \cdot \cdots \cdot 0.0[tab] \cdot \cdots \cdot 0.0[tab] \cdot \cdots \cdot 0.0[tab] \cdot \# \cdot Start \cdot Scan \cdot values \cdot in \cdot mm \cdot (\cdot X \cdot, \cdot Y \cdot, \cdot Z \cdot)
\texttt{\%EDS} \cdot [\texttt{tab}] \cdot \cdots \cdot 0.0[\texttt{tab}] \cdot \cdots \cdot 0.0[\texttt{tab}] \cdot \cdot \cdot 300.0[\texttt{tab}] \cdot \# \cdot \texttt{End} \cdot \texttt{Scan} \cdot \texttt{values} \cdot \texttt{in} \cdot \texttt{mm} \cdot (\cdot \texttt{X} \cdot, \cdot \texttt{Y} \cdot, \cdot \texttt{Z} \cdot)
!.....
#[tab] ·· X ·· ·· · · Y ·· · · · · Z ·· · · · Dose
=\cdot [tab] \cdot\cdot\cdot\cdot0.0[tab] \cdot\cdot\cdot\cdot10.0[tab] \cdot\cdot\cdot99.7
=\cdot [tab] \cdot \cdot \cdot \cdot 0.0 [tab] \cdot \cdot \cdot \cdot 0.0 [tab] \cdot \cdot \cdot 20.0 [tab] \cdot \cdot 100.0
= [tab] · · · · 0.0 [tab] · · · · 0.0 [tab] · · · 30.0 [tab] · · · 96.1
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 40.0[tab] \cdot \cdot \cdot \cdot 91.8
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 50.0[tab] \cdot \cdot \cdot \cdot 88.1
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 60.0[tab] \cdot \cdot \cdot \cdot 83.9
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 70.0[tab] \cdot \cdot \cdot \cdot 79.8
= [tab] \cdots 0.0[tab] \cdots 0.0[tab] \cdots 80.0[tab] \cdots 75.7
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 90.0[tab] \cdot \cdot \cdot \cdot 71.7
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 100.0[tab] \cdot \cdot \cdot \cdot 67.8
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 110.0[tab] \cdot \cdot \cdot 64.4
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 120.0[tab] \cdot \cdot \cdot 60.5
    [tab] · · · · 0.0 [tab] · · · · 0.0 [tab] · · · 130.0 [tab] · · · 57.5
= [tab] \cdots 0.0[tab] \cdots 0.0[tab] \cdots 140.0[tab] \cdots 54.2
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 150.0[tab] \cdot \cdot \cdot 51.0
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 160.0[tab] \cdot \cdot \cdot 48.1
= [tab] \cdots 0.0[tab] \cdots 0.0[tab] \cdots 170.0[tab] \cdots 45.2
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 180.0[tab] \cdot \cdot \cdot 42.5
= [tab] \cdots 0.0[tab] \cdots 0.0[tab] \cdots 190.0[tab] \cdots 40.5
= [tab] \cdots 0.0[tab] \cdots 0.0[tab] \cdots 38.3
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 220.0[tab] \cdot \cdot \cdot 34.2
= [tab] · · · · 0.0[tab] · · · · 0.0[tab] · · · 240.0[tab] · · · 30.5
= [tab] \cdots 0.0[tab] \cdots 0.0[tab] \cdots 260.0[tab] \cdots 26.8
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 280.0[tab] \cdot \cdot \cdot 24.1
= [tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot \cdot 0.0[tab] \cdot \cdot \cdot 300.0[tab] \cdot \cdot \cdot 21.4
:EOM··#·End·of·Measurement
:EOF·#·End·of·File
```



In case of any further questions, please contact us under:

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