







DOC NUMBER:

569-DB7B-AIC-750-001

CLIENT NUMBER:

PRD-AIC-DSH-039

CLIENT:

TAKEDA/BAXALTA

PROJECT:

**BURITI EPCVM PROJECT** 

# DATA SHEET ANALYZING INDICATING TRANSMITTER

1	17NOV2021	ISSUED FOR CONSTRUCTION UPDATED AS PER NOTES	MAB	MAF	RSP
0	13SEP2021	ISSUED FOR CONSTRUCTION	MAB	MAF	RSP
Α	31MAR2021	60% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV



TITLE

25







PRD-AIC-DSH-039 NUMBER: CLIENT NR: 569-DB7B-AIC-750-001

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# ANALYZING INDICATING TRANSMITTER

DOCUMENT REVIEW CONTROL																			
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TITLE SHEET:

ANALYZING INDICATING TRANSMITTER

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#### REFERENCE DOCUMENTS

7B-Z-0-2-10 DRUG SUBSTANCE - 320L BIOREACTOR, BRE-5501 VESSEL
7B-Z-0-2-12 DRUG SUBSTANCE - 2500L BIOREACTOR BRE-5601 - VESSEL
7B-Z-0-2-14 DRUG SUBSTANCE - 2500L BIOREACTOR N°2, BRE-5602 - VESSEL
7B-Z-0-2-57 DRUG SUBSTANCE - PURIFIED WATER STORAGE TANK, TQ-6302
7B-Z-0-2-60 DRUG SUBSTANCE - HOT WFI STORAGE TANK TQ-6401

PRD-AIC-LIS-046 INTEGRATED PROJECT SERVICES - INSTRUMENT SUGGESTED SUPPLIER LIST

#### **GENERAL NOTES**

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- 2 All transmitters must have enclosures, whose parts exposed to the atmosphere are resistant to environmental conditions, including those generated by the condition of the process, enabling light external cleaning.
- 3 The identification plates must be manufactured in stainless steel AISI 304, permanently attached to the instruments with tag and serial number. The serial number of the instrument, when possible, can be engraved on the body itself.
- 4 The identification plates must be manufactured in stainless steel AISI 304, permanently attached to the instruments with tag and serial number. The serial number of the instrument, when possible, can be engraved on the body itself.
- 5 The manufacturer must inform in the catalog of the transmitter the dimensions of the same for installation in the place indicated in the project.
- 6 The liquid crystal instrument display with internal illumination for all the information that is necessary for its calibration and indication of necessary variables.
- 7 All transmitters must be provided with protection type certificates compatible with the respective area classification. If the enclosure requires certificates regarding type and degree of protection, both proofs must be explicit in the same certificate. The certificates must be issued by INMETRO or an accredited body.
- 8 Grounding rings must be provided in compatible material, with the instrument box and easy access for assembly, being at least AISI 316.

**REVISION 0 - NOTES** 

1- REVISED AS PER INSTRUMENT LIST NUMBER PRD-AIC-LIS-010\_B\_PCS\_INSTRUMENT\_INDEX AND BACKLOG NUMBER 99000-184.0 2021.03.30 - A&IC DOCUMENTS - COMMENTS REV.01

**REVISION 1 - NOTES** 

1 - ACCORDING NEW ARQUITECTURE UPDATED









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## ANALYZING INDICATING TRANSMITTER

								1 1			
	1	INSTRUMENT TAG NUMBE	R		AIT-630202A						
ĺ	2	SERVIÇE			OZONE ANALYSER - AMBIENT						
Ī	3	P&ID			7B-Z-0-2-57						
ı	4	PIPE LINE	EQUIPMENT	NUMBER	- AMBIENT						
₽ F	5	FUNCTION				OZONE	ANALYSER				
GENERAL	6	CLASS. AREA					-				
3EV	7	CLASS. OF THE CASING					IP-65				
Ĭ	8	HOUSING MATERIAL				POLYC	CARBONATE				
ı	9	ASSEMBLY					AREA				
ı	10	SUPPLY VOLTAGE					24Vdc				
ı	11	ELECTRICAL CONNECTION	V			1	/2"NPT				
~		TYPE				ANALO	G + RELAYS				
		EXIT SIGN				4	~ 20mA				
LIN:	14	12/nov/21				1 AL	ARM SPDT				
TRANSMITTER	15	OUTPUT LINEARIZATION					-				
본	16	REPEATABILITY / STABILIT	Υ				-				
ヿ	17	TYPE / TECHNOLOGY				MANUFAC7	URE STANDARD				
ı	18	SENSOR MATERIAL				MANUFACT	URE STANDARD				
ı	19	LOCAL INDICATION				LCD	DISPLAY				
S S		SCALE				0	& 100%				
SENSOR		LIFESPAN					-				
S		PRECISION			-						
ŀ		RESPONSE TIME			-						
ŀ		STABILITY			-						
┪		NUMBER OF CONTACTS			1						
ŀ		NUMBER OF CONTACTS / I	FORM		1 SPDT						
ŀ		LOAD TYPE				RE	SISTIVE				
S		CAPACITY			5A						
KEYS		OCCUPATION			ALARM + SINALIZATION						
	30	ALARM LEVEL			ADJUSTABLE						
ı	31	RELAY DE-ENERGIZES WH	HEN		-						
ı	32	CONTACT ACTION			-						
_	33	KIT FOR MOUNTING ON TU	JBE Ø 2 "		YES						
CESSORIES	34	CALIBRATION KIT			YES						
SOF	35	OUTPUT / SCALE INDICATO	OR		YES						
SES	36	INTERCONNECTION CABL	E		YES						
Ă	37	NAMEPLATE				NOTE	3, PAGE 3				
ヿ	38	FLUID	PHYSICAL STATE	JS	OZC	NE	LIQ	UID			
ľ		MINIMUM FLOW	NORMAL	MAXIMUM	-	T -	-	-			
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	1	-	4barG			
SS	41	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	1	-	-			
6	42	PROJECT FLOW			-						
Ž	43	DESIGN PRESSURE	DESIGN TEN	MPERATURE	-						
S	44	DENSITY @ OPERATING C	ONDITION		- kg/m³						
)   	45	VISCOSITY @ OPERATING	CONDITION		- Cp						
OPERATING CONDITIONS	46	FLUID CONDUCTIVITY			- μS/cm²						
E		INCRUSTATION					-				
ا ۲		SUSPENDED SOLIDS (%)					-				
-		MAXIMUM LOSS OF LOAD	ALLOWED				-				
	50										
$\dashv$		MANUFACTURER				ULTIMA	OR SIMILAR				
					ULTIMA OR SIMILAR						









TITLE

SHEET:

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# ANALYZING INDICATING TRANSMITTER

								1			
	1	INSTRUMENT TAG NUMBE	R			Al	T-630202B				
	2	SERVIÇE			OZONE ANALYSER - AMBIENT						
	3	P&ID			7B-Z-0-2-57						
	4	PIPE LINE	EQUIPMENT	NUMBER	- AMBIENT						
٦	5	FUNCTION				OZON	E ANALYSER				
֡֝֟֝֟֟֟֟֝֟֟֟֟֟	6	CLASS. AREA					-				
GENERAL	7	CLASS. OF THE CASING					IP-65				
Ĭ	8	HOUSING MATERIAL				POLY	CARBONATE				
	9	ASSEMBLY					AREA				
	10	SUPPLY VOLTAGE					24Vdc				
		ELECTRICAL CONNECTION	V				1/2"NPT				
		TYPE				ANALO	OG + RELAYS				
RANSMITTER		EXIT SIGN					1 ~ 20mA				
		12/nov/21					ARM SPDT				
2		OUTPUT LINEARIZATION				,,,,	-				
\$		REPEATABILITY / STABILIT	~								
$\dashv$		TYPE / TECHNOLOGY	,			MANUEAC	TURE STANDARD				
		SENSOR MATERIAL					TURE STANDARD				
		LOCAL INDICATION					D DISPLAY				
إ إ											
CENSO		SCALE				· · ·	0 & 100%				
5		LIFESPAN			-						
		PRECISION			<u>-</u>						
		RESPONSE TIME			-						
_		STABILITY			-						
	25	NUMBER OF CONTACTS			1						
	26	NUMBER OF CONTACTS / I	FORM		1 SPDT						
		LOAD TYPE			RESISTIVE						
2 7	28	CAPACITY			5A						
1	29	OCCUPATION			ALARM + SINALIZATION						
	30	ALARM LEVEL			ADJUSTABLE						
	31	RELAY DE-ENERGIZES WH	HEN		-						
	32	CONTACT ACTION			-						
$\prod$	33	KIT FOR MOUNTING ON TU	IBE Ø 2 "		YES						
į	34	CALIBRATION KIT			YES YES						
3	35	OUTPUT / SCALE INDICATO	OR								
OL COCK	36	INTERCONNECTION CABL	E		YES						
É	37	NAMEPLATE									
	38	FLUID	PHYSICAL STATU	<i>I</i> S	OZO	ONE	LIQ	UID			
	39	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-		-	4barG			
۱ <u>۱</u>		MINIMUM TEMPERATURE		MAXIMUM	-		-	-			
or Ersamine Continues		PROJECT FLOW	1		-	<del>_</del>		I			
į		DESIGN PRESSURE	DESIGN TEM	IPERATURE			-				
3		DENSITY @ OPERATING C									
		VISCOSITY @ OPERATING			- kg/m³						
;		FLUID CONDUCTIVITY	55,15,1,10,14		- Cp - μS/cm²						
i		INCRUSTATION					-				
5		SUSPENDED SOLIDS (%)					-				
			ALLOWED				-				
		MAXIMUM LOSS OF LOAD	ALLUWED				-				
4	50	MANUEACTURES					A OD OWA!! AD				
		MANUFACTURER				UL I IM.	A OR SIMILAR				
	52	MODEL									









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SHEET:

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## ANALYZING INDICATING TRANSMITTER

								1			
	1	INSTRUMENT TAG NUMBE	R			AIT-	630202C				
	2	SERVIÇE			OZONE ANALYSER - AMBIENT						
	3	P&ID			7B-Z-0-2-57						
	4	PIPE LINE	EQUIPMENT NU	IMBER	- AMBIENT						
ΑΓ	5	FUNCTION				OZONE	ANALYSER				
ER.	6	CLASS. AREA					-				
GENERAL	7	CLASS. OF THE CASING					IP-65				
	8	HOUSING MATERIAL				POLYC	ARBONATE				
		ASSEMBLY					AREA				
		SUPPLY VOLTAGE					24Vdc				
	_		V				2"NPT				
		TYPE	·				G + RELAYS				
TRANSMITTER		EXIT SIGN					~ 20mA				
TIN		12/nov/21					IRM SPDT				
NS		OUTPUT LINEARIZATION				, ALA	-				
TRA		REPEATABILITY / STABILIT	-v								
_	<u> </u>	TYPE / TECHNOLOGY	•			MANUEACT	- URE STANDARD				
							URE STANDARD				
SENSOR		SENSOR MATERIAL									
		LOCAL INDICATION					DISPLAY				
		SCALE				0.8	§ 100%				
SEI		LIFESPAN					-				
		PRECISION			-						
		RESPONSE TIME			-						
	_	STABILITY			-						
		NUMBER OF CONTACTS			1						
		NUMBER OF CONTACTS / I	FORM			1	SPDT				
		LOAD TYPE				RE	SISTIVE				
KEYS	28	CAPACITY					5A				
Æ	29	OCCUPATION			ALARM + SINALIZATION						
	30	ALARM LEVEL			ADJUSTABLE						
	31	RELAY DE-ENERGIZES WH	HEN		<del>-</del>						
	<u> </u>	CONTACT ACTION			<u>-</u>						
က္ပ	33	KIT FOR MOUNTING ON TU	IBE Ø 2 "				YES				
CESSORIES	34	CALIBRATION KIT			YES						
320	35	OUTPUT / SCALE INDICATO	OR		YES						
CE	36	INTERCONNECTION CABL	E		YES						
٧		NAMEPLATE									
	38	FLUID	PHYSICAL STATUS		ozo	ONE	LIQ	UID			
	39	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-			
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-		-	4barG			
SNC	41	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-		-	-			
) E	42	PROJECT FLOW			-						
DVC	43	DESIGN PRESSURE	DESIGN TEMPE	RATURE	-						
20,6	44	DENSITY @ OPERATING C	ONDITION		- kg/m³						
Ŋ	45	VISCOSITY @ OPERATING	CONDITION		- Cp						
	16	FLUID CONDUCTIVITY			- μS/cm²						
RATI	40	1					-				
DERA TI		INCRUSTATION			-						
OPERATI	47	INCRUSTATION SUSPENDED SOLIDS (%)									
OPERATI	47 48		ALLOWED				-				
OPERATI	47 48	SUSPENDED SOLIDS (%)	ALLOWED				-				
OPERATING CONDITIONS	47 48 49 50	SUSPENDED SOLIDS (%)	ALLOWED			ULTIMA	- OR SIMILAR				









TITLE

## ANALYZING INDICATING TRANSMITTER

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,	`_	12NG INDICATING	, IIIAIIOIIIIII	• • •				1				
Т	1	INSTRUMENT TAG NUMBE	 R		T	AI	T-640101	/i■				
		SERVIÇE	· ·		CONDUCTIVITY ANALYSER							
H		P&ID			7B-Z-0-2-57							
F		PIPE LINE	EQUIPMENT NUI	MBER	1"-HWFI-640116-SS3-HC -							
<u>.</u>		FUNCTION	1=40				I TWFI SUPPLY FRO	M WFI GFN				
• ⊩		CLASS. AREA			00/1200		-					
H		CLASS. OF THE CASING					IP-65					
`  -		HOUSING MATERIAL				POI VI	CARBONATE					
H		ASSEMBLY					AREA					
H		SUPPLY VOLTAGE					24Vdc					
$\perp$	-	ELECTRICAL CONNECTION	J				1/2"NPT					
+		TYPE	v		1		OG + RELAYS					
H		EXIT SIGN					~ 20mA					
-		12/nov/21					ARM SPDT					
-		OUTPUT LINEARIZATION				TAL	ARM SEDT					
H		REPEATABILITY / STABILIT	·V									
4		TYPE / TECHNOLOGY	1			MANUEAC	TURE STANDARD					
$\vdash$		SENSOR MATERIAL			-		TURE STANDARD					
⊢												
-		LOCAL INDICATION			-		D DISPLAY					
$\mid$		SCALE			1	0	& 100%					
		LIFESPAN			-							
$\vdash$		PRECISION			<u>-</u>							
$\perp$		RESPONSE TIME			-							
-		STABILITY				1						
-		NUMBER OF CONTACTS				1 SPDT						
_  _		NUMBER OF CONTACTS / I	-URM									
- 1-		LOAD TYPE				RESISTIVE 5A						
: ⊢		CAPACITY			ALARM + SINALIZATION							
-		OCCUPATION										
$\vdash$		ALARM LEVEL	(F.)		ADJUSTABLE							
$\perp$	_	RELAY DE-ENERGIZES WH	1EN		-							
-		CONTACT ACTION	105.60.1		- VF0							
ì L		KIT FOR MOUNTING ON TU	IBE Ø 2 "		YES							
-	_	CALIBRATION KIT			-	YES						
		OUTPUT / SCALE INDICATO			YES							
'⊢		INTERCONNECTION CABLE	=		-	YES						
4		NAMEPLATE	Inches and an analysis		NOTE 3, PAGE 3  HOT WFI LIQUID							
⊢		FLUID	PHYSICAL STATUS	Transmuna	НОТ							
$\perp$		MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	- 4har0				
		MINIMUM PRESSURE	NORMAL	MAXIMUM	-		-	4barG				
			NORMAL	MAXIMUM	-		<u>-</u>	-				
-		PROJECT FLOW	DE0/04/ ==: :==	247105	-		<u> </u>					
ŀ		DESIGN PRESSURE	DESIGN TEMPER	KAIUKE	-	-						
		DENSITY @ OPERATING C			-	Ng						
1		VISCOSITY @ OPERATING	CONDITION		-	ОР						
1		FLUID CONDUCTIVITY			-	- μS/cm²						
		INCRUSTATION					-					
$\vdash$		SUSPENDED SOLIDS (%)					-					
$\vdash$		MAXIMUM LOSS OF LOAD	ALLOWED		1		-					
-	50				1	=						
-		MANUFACTURER				ULTIMA	A OR SIMILAR					
-1	52	MODEL										