	
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
A	31MAR2021	60% DD ISSUE	MAB	MAF	RSP
REV	DATE	DESCRIPTION	EXEC	CHECK	APPROV

NUMBER: 569-DB7B-AIC-750-001

CLIENT NR: PRD-AIC-DSH-039

TITLE

SHEET:
2 de 7





ANALYZING INDICATING TRANSMITTER

REV.:
1

DOCUMENT REVIEW CONTROL

Revision	A	0	1	2	3	4	Revision	A	B	0	1	2	3	Revision	A	B	0	1	2	3
Page							Page							Page						
1	X	X	X				26							51						
2	X	X	X				27							52						
3	X	X	X				28							53						
4	X	X	X				29							54						
5	X	X	X				30							55						
6	X	X	X				31							56						
7	X	X	X				32							57						
8	X	X					33							58						
9	X	X					34							59						
10	X	X					35							60						
2	X	X					36							61						
12	X	X					37							62						
13	X	X					38							63						
14	X	X					39							64						
15	X	X					40							65						
16	X	X					41							66						
17	X						42							67						
18	X						43							68						
19							44							69						
20							45							70						
21							46							71						
22							47							72						
23							48							73						
24							49							74						
25							50							75						

The information contained in this document is the property of TESSLER Engenharia and is provided to the customer under the condition that they are not used for other purposes other than those contractually established.

 		 	
NUMBER:	569-DB7B-AIC-750-001	CLIENT NR:	PRD-AIC-DSH-039
TITLE			SHEET:
ANALYZING INDICATING TRANSMITTER			3 de 7
			REV.: 1
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

2

- 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

NUMBER: 569-DB7B-AIC-750-001

CLIENT NR: PRD-AIC-DSH-039

TITLE

ANALYZING INDICATING TRANSMITTER

SHEET:

4 de 7

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		AIT-630202A				
	2	SERVICE		OZONE ANALYSER - AMBIENT				
	3	P&ID		7B-Z-0-2-57				
	4	PIPE LINE	EQUIPMENT NUMBER		-	AMBIENT		
	5	FUNCTION		OZONE ANALYSER				
	6	CLASS. AREA		-				
	7	CLASS. OF THE CASING		IP-65				
	8	HOUSING MATERIAL		POLYCARBONATE				
	9	ASSEMBLY		AREA				
	10	SUPPLY VOLTAGE		24Vdc				
	11	ELECTRICAL CONNECTION		1/2"NPT				
TRANSMITTER	12	TYPE		ANALOG + RELAYS				
	13	EXIT SIGN		4 ~ 20mA				
	14	12/nov/21		1 ALARM SPDT				
	15	OUTPUT LINEARIZATION		-				
	16	REPEATABILITY / STABILITY		-				
SENSOR	17	TYPE / TECHNOLOGY		MANUFACTURE STANDARD				
	18	SENSOR MATERIAL		MANUFACTURE STANDARD				
	19	LOCAL INDICATION		LCD DISPLAY				
	20	SCALE		0 & 100%				
	21	LIFESPAN		-				
	22	PRECISION		-				
	23	RESPONSE TIME		-				
	24	STABILITY		-				
KEYS	25	NUMBER OF CONTACTS		1				
	26	NUMBER OF CONTACTS / FORM		1 SPDT				
	27	LOAD TYPE		RESISTIVE				
	28	CAPACITY		5A				
	29	OCCUPATION		ALARM + SINALIZATION				
	30	ALARM LEVEL		ADJUSTABLE				
	31	RELAY DE-ENERGIZES WHEN		-				
	32	CONTACT ACTION		-				
ACESSORIES	33	KIT FOR MOUNTING ON TUBE Ø 2 "		YES				
	34	CALIBRATION KIT		YES				
	35	OUTPUT / SCALE INDICATOR		YES				
	36	INTERCONNECTION CABLE		YES				
	37	NAMEPLATE		NOTE 3, PAGE 3				
OPERATING CONDITIONS	38	FLUID	PHYSICAL STATUS		OZONE		LIQUID	
	39	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	4barG
	41	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-
	42	PROJECT FLOW		-				
	43	DESIGN PRESSURE	DESIGN TEMPERATURE		-			
	44	DENSITY @ OPERATING CONDITION		-		kg/m³		
	45	VISCOSITY @ OPERATING CONDITION		-		Cp		
	46	FLUID CONDUCTIVITY		-		µS/cm²		
	47	INCRUSTATION				-		
	48	SUSPENDED SOLIDS (%)				-		
	49	MAXIMUM LOSS OF LOAD ALLOWED				-		
	50							
	51	MANUFACTURER		ULTIMA OR SIMILAR				
	52	MODEL						

NUMBER: 569-DB7B-AIC-750-001

CLIENT NR: PRD-AIC-DSH-039

TITLE

ANALYZING INDICATING TRANSMITTER

SHEET:

5 de 7

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		AIT-630202B				
	2	SERVICE		OZONE ANALYSER - AMBIENT				
	3	P&ID		7B-Z-0-2-57				
	4	PIPE LINE	EQUIPMENT NUMBER		-	AMBIENT		
	5	FUNCTION		OZONE ANALYSER				
	6	CLASS. AREA		-				
	7	CLASS. OF THE CASING		IP-65				
	8	HOUSING MATERIAL		POLYCARBONATE				
	9	ASSEMBLY		AREA				
	10	SUPPLY VOLTAGE		24Vdc				
	11	ELECTRICAL CONNECTION		1/2"NPT				
TRANSMITTER	12	TYPE		ANALOG + RELAYS				
	13	EXIT SIGN		4 ~ 20mA				
	14	12/nov/21		1 ALARM SPDT				
	15	OUTPUT LINEARIZATION		-				
	16	REPEATABILITY / STABILITY		-				
SENSOR	17	TYPE / TECHNOLOGY		MANUFACTURE STANDARD				
	18	SENSOR MATERIAL		MANUFACTURE STANDARD				
	19	LOCAL INDICATION		LCD DISPLAY				
	20	SCALE		0 & 100%				
	21	LIFESPAN		-				
	22	PRECISION		-				
	23	RESPONSE TIME		-				
	24	STABILITY		-				
KEYS	25	NUMBER OF CONTACTS		1				
	26	NUMBER OF CONTACTS / FORM		1 SPDT				
	27	LOAD TYPE		RESISTIVE				
	28	CAPACITY		5A				
	29	OCCUPATION		ALARM + SINALIZATION				
	30	ALARM LEVEL		ADJUSTABLE				
	31	RELAY DE-ENERGIZES WHEN		-				
	32	CONTACT ACTION		-				
ACESSORIES	33	KIT FOR MOUNTING ON TUBE Ø 2 "		YES				
	34	CALIBRATION KIT		YES				
	35	OUTPUT / SCALE INDICATOR		YES				
	36	INTERCONNECTION CABLE		YES				
	37	NAMEPLATE		NOTE 3, PAGE 3				
OPERATING CONDITIONS	38	FLUID	PHYSICAL STATUS		OZONE		LIQUID	
	39	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-		-	4barG
	41	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-		-	-
	42	PROJECT FLOW				-		
	43	DESIGN PRESSURE	DESIGN TEMPERATURE				-	
	44	DENSITY @ OPERATING CONDITION				-	kg/m³	
	45	VISCOSITY @ OPERATING CONDITION				-	Cp	
	46	FLUID CONDUCTIVITY				-	µS/cm²	
	47	INCRUSTATION						-
	48	SUSPENDE SOLIDS (%)						-
	49	MAXIMUM LOSS OF LOAD ALLOWED						-
	50							
	51	MANUFACTURER		ULTIMA OR SIMILAR				
	52	MODEL						

NUMBER: 569-DB7B-AIC-750-001

CLIENT NR: PRD-AIC-DSH-039

TITLE

SHEET:

6 de 7

ANALYZING INDICATING TRANSMITTER

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		AIT-630202C					
	2	SERVICE		OZONE ANALYSER - AMBIENT					
	3	P&ID		7B-Z-0-2-57					
	4	PIPE LINE	EQUIPMENT NUMBER		-	AMBIENT			
	5	FUNCTION		OZONE ANALYSER					
	6	CLASS. AREA		-					
	7	CLASS. OF THE CASING		IP-65					
	8	HOUSING MATERIAL		POLYCARBONATE					
	9	ASSEMBLY		AREA					
	10	SUPPLY VOLTAGE		24Vdc					
	11	ELECTRICAL CONNECTION		1/2"NPT					
TRANSMITTER	12	TYPE		ANALOG + RELAYS					
	13	EXIT SIGN		4 ~ 20mA					
	14	12/nov/21		1 ALARM SPDT					
	15	OUTPUT LINEARIZATION		-					
	16	REPEATABILITY / STABILITY		-					
SENSOR	17	TYPE / TECHNOLOGY		MANUFACTURE STANDARD					
	18	SENSOR MATERIAL		MANUFACTURE STANDARD					
	19	LOCAL INDICATION		LCD DISPLAY					
	20	SCALE		0 & 100%					
	21	LIFESPAN		-					
	22	PRECISION		-					
	23	RESPONSE TIME		-					
	24	STABILITY		-					
KEYS	25	NUMBER OF CONTACTS		1					
	26	NUMBER OF CONTACTS / FORM		1 SPDT					
	27	LOAD TYPE		RESISTIVE					
	28	CAPACITY		5A					
	29	OCCUPATION		ALARM + SINALIZATION					
	30	ALARM LEVEL		ADJUSTABLE					
	31	RELAY DE-ENERGIZES WHEN		-					
	32	CONTACT ACTION		-					
ACESSORIES	33	KIT FOR MOUNTING ON TUBE Ø 2 "		YES					
	34	CALIBRATION KIT		YES					
	35	OUTPUT / SCALE INDICATOR		YES					
	36	INTERCONNECTION CABLE		YES					
	37	NAMEPLATE		NOTE 3, PAGE 3					
OPERATING CONDITIONS	38	FLUID	PHYSICAL STATUS		OZONE		LIQUID		
	39	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-	
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	4barG	
	41	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-	
	42	PROJECT FLOW		-					
	43	DESIGN PRESSURE	DESIGN TEMPERATURE		-				
	44	DENSITY @ OPERATING CONDITION		-		kg/m³			
	45	VISCOSITY @ OPERATING CONDITION		-		Cp			
	46	FLUID CONDUCTIVITY		-		µS/cm²			
	47	INCRUSTATION				-			
	48	SUSPENDE SOLIDS (%)				-			
	49	MAXIMUM LOSS OF LOAD ALLOWED				-			
	50								
	51	MANUFACTURER		ULTIMA OR SIMILAR					
	52	MODEL							

NUMBER: 569-DB7B-AIC-750-001

CLIENT NR: PRD-AIC-DSH-039

TITLE

ANALYZING INDICATING TRANSMITTER

SHEET:

7 de 7

REV.:

1

GENERAL	1	INSTRUMENT TAG NUMBER		AIT-640101						
	2	SERVICE		CONDUCTIVITY ANALYSER						
	3	P&ID		7B-Z-0-2-57						
	4	PIPE LINE	EQUIPMENT NUMBER		1"-HWWI-640116-SS3-HC	-				
	5	FUNCTION		CONDUCTIVITY OF HOT WFI SUPPLY FROM WFI GEN						
	6	CLASS. AREA		-						
	7	CLASS. OF THE CASING		IP-65						
	8	HOUSING MATERIAL		POLYCARBONATE						
	9	ASSEMBLY		AREA						
	10	SUPPLY VOLTAGE		24Vdc						
	11	ELECTRICAL CONNECTION		1/2"NPT						
TRANSMITTER	12	TYPE		ANALOG + RELAYS						
	13	EXIT SIGN		4 ~ 20mA						
	14	12/nov/21		1 ALARM SPDT						
	15	OUTPUT LINEARIZATION		-						
	16	REPEATABILITY / STABILITY		-						
SENSOR	17	TYPE / TECHNOLOGY		MANUFACTURE STANDARD						
	18	SENSOR MATERIAL		MANUFACTURE STANDARD						
	19	LOCAL INDICATION		LCD DISPLAY						
	20	SCALE		0 & 100%						
	21	LIFESPAN		-						
	22	PRECISION		-						
	23	RESPONSE TIME		-						
	24	STABILITY		-						
KEYS	25	NUMBER OF CONTACTS		1						
	26	NUMBER OF CONTACTS / FORM		1 SPDT						
	27	LOAD TYPE		RESISTIVE						
	28	CAPACITY		5A						
	29	OCCUPATION		ALARM + SINALIZATION						
	30	ALARM LEVEL		ADJUSTABLE						
	31	RELAY DE-ENERGIZES WHEN		-						
	32	CONTACT ACTION		-						
ACCESSORIES	33	KIT FOR MOUNTING ON TUBE Ø 2 "		YES						
	34	CALIBRATION KIT		YES						
	35	OUTPUT / SCALE INDICATOR		YES						
	36	INTERCONNECTION CABLE		YES						
	37	NAMEPLATE		NOTE 3, PAGE 3						
OPERATING CONDITIONS	38	FLUID	PHYSICAL STATUS		HOT WFI		LIQUID			
	39	MINIMUM FLOW	NORMAL	MAXIMUM	-	-	-	-		
	40	MINIMUM PRESSURE	NORMAL	MAXIMUM	-	-	-	4barG		
	41	MINIMUM TEMPERATURE	NORMAL	MAXIMUM	-	-	-	-		
	42	PROJECT FLOW		-						
	43	DESIGN PRESSURE	DESIGN TEMPERATURE		-					
	44	DENSITY @ OPERATING CONDITION		-		kg/m³				
	45	VISCOSITY @ OPERATING CONDITION		-		Cp				
	46	FLUID CONDUCTIVITY		-		µS/cm²				
	47	INCRUSTATION				-				
	48	SUSPENDED SOLIDS (%)				-				
	49	MAXIMUM LOSS OF LOAD ALLOWED				-				
	50									
	51	MANUFACTURER		ULTIMA OR SIMILAR						
	52	MODEL								