

Control System

FEEDING PROCESS MANAGEMENT VIA WEB BASED INTERFACE

RVO-TEC SYSTEM

ALL INFORMATION IN ONE DATABASE

REMOTE ACCESS

ACCESS YOUR SYSTEM ONLINE

DATALOGGING

ALARMS VIA GSM OPTIONAL CONTROL AND ALARMS OR LAN COMMUNICATION

INDIVIDUAL FEEDERS AND ROBOT FEEDING WORK SEPARATELY OR COMBINED TOGETHER

PIPE FEEDING AS SEPARATE SYSTEM EACH CONTROLLER HAS 8 ANALOG AND 5 DIGITAL INPUTS FOR YOUR MEASUREMENTS AND DEVICES RESULTING IN MORE ACCURATE FEEDING AND IMPROVED WATER QUALITY

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ARVO-TEC PROFESSIONAL FEEDING CONTROL

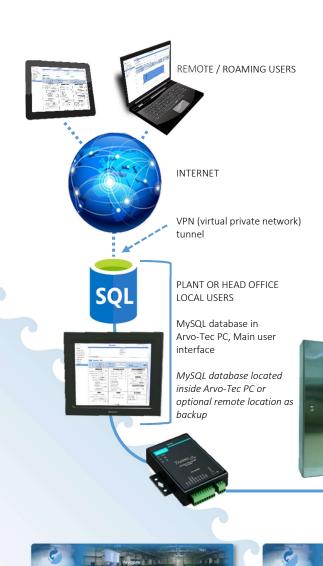
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ARVOPRO WEB BASED FEEDING SOFTWARE & PC USER INTERFACE



Adding a PC connection with web based software to Arvo-Tec feeding system gives access to clear, easy to use graphic interface with optimized functions for managing your farm with ease.

Control PC works as a central user interface to the system enabling control of all WOLF-control units, probes, feeders and other connected equipment from one point.

Quick overview of you measurements, alarms and detailed tank status.

Create day reports, feed reports and store all your data.

Information can be exported to be used by 3rd party software e.g. Excel, Fishtalk.

System is accessible using a browser anywhere through VPN, enabling secure online water quality -and feeding monitoring. PC connection enables on-line support from Arvo-Tec service team should the need arise.



 All and all and

Feeding Perioids



Data logging, graph view

Measurements View: clear warning and alarm indicators

			Rythmät 5-6 (5)	Alarms Alarm logs
15.03	Updated: 31.07,2013 13:151	Tank name Rytmat 5-6 Fish name Fish	100 Aug 100	Dontrol units Data logging Teeds Dosing units
er 900 ps	Orggen in outlet Water flow in: Water flow need.	DOSING UNITS Name Alabati autory Speed 172 gs	FEEDING Feeding turnular Trout E Feeding change 0.43 Feeding change 1.300 %	Loternal Alaems Feeding formulas Feeding groups Heasurements Persons
RRUPTION a 00:00:00 = 00 1		Feed Name Food1 Metabolised energy 20 MJ/kg Feed consumption (2,723.97 kg	Daily does: 6.825 kg One dose: 77.4 kg Feeding tequency: 57	leports Canito
NEMENTS	Temperature:	Feed consumption (2023) kg FCR 08 Feed conversion rate DOSING:	Fed task 92.274 kg Reset Fed today 2.332 kg Reset Fed yesterday 4.335 kg	
	ALAS No Time To Too Small (2008)	Dosing time: 45 s Amount of Doses: 1	Fish amount 18,000	
AF	Temperature: Owygen: ALAF No Time To	Freed conversion rate DOSING; Dosing time: 45 s	Fed today: 2.322 kg Reset Fed yesterday: 4.335 kg FISH	

Tank View: advanced feeding controls



ARVOPRO – WEB BASED FEEDING SOFTWARE – FEEDING FORMULAS & TANK SPECIFIC CONTROLS

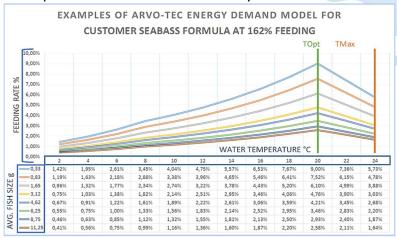
Alarm logs	Name	9
Control units	Alaha	alli
Data logging	Tukia	sema
Feeds	Uusi	Halli
Dosing units	Ryhm	nät 5-6
External Alarms	Mittal	kone
Feeding formulas	Tuki	asema (2)
Feeding groups		
Measurements	ld	Formula name
User roles	1	Trout
Persons	2	Salmon
Reports	3	Whitefish
Tanks	4	Arcticcharr
	5	Seabream
	6	Seabass
	7	Eel
	8	Carp
	9	Turbot
	10	Formula10
	11	Formula11

One of the several tools built in to ArvoPRO are the feeding formulas.

These formulas are unique to Arvo-Tec systems and are used globally in hundreds of fisheries and hatcheries with Arvo-Tec equipment.

These formulas have been adjusted for each fish species, making use of an energy demand model that takes into account the water temperature and size of the fish.

Co-operate with Arvo-Tec to create your own formulas.



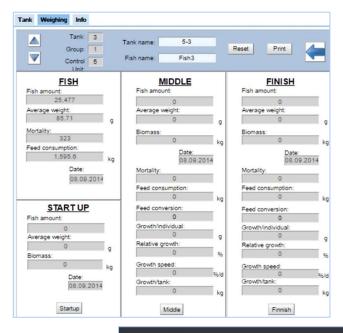
Once set up correctly ArvoPRO will log all your data, create reports, measure water quality, calculate fish growth, generate alarms and adjust feeding in real time to maximize fish growth with minimal labour.

labou	ır.										Tank name: 5-3	Updated:
Indivi	dual tar	nk c	ontr	ols						Group: 1 Control Unit: 5	Fish name: Fish3	23.09.16 10:09:53
										FEEDING	DOSING UNITS	WATER
Quick	access									Feeding formula: Trout	Name: Dosing unit1 V	Oxygen in outlet: 12.538 mg/l
										Feeding change: 0.15	Speed: 1.752 g/s	Water flow in: 999 I/s
Flexib	le cont	rol										Water flow need: 9.213 I/s
ПСЛЮ		.01								Feeding rate: 0.231 %	FEED	
Alarms Alarm logs	Controller Number			,	łame	1	1-6 of 6 🕅	• • •	Î	Daily dose: 4.998 kg	Feed Name Feed1	INTERRUPTION Timed: 00:00:00
Control units Data logging	1				Alahalii Fukiasema					One dose: 315.36 g	Metabolised energy; 20 MJ/kg	Timed.
Feeds	3				Jusi Halli				F	eeding frequency 16		In use: Off 🔻
Dosing units External Alarms	4				Robotti Ryhmät 5-6			_			Feed consumption: 3,213.79 kg	
Feeding formulas	6				Wittakone				2.1	Fed total: 1,579.45 kg Reset	FCR: 0.8	MEASUREMENTS
Feeding groups Measurements	Ryhmät 5-6 (5)								F	ed today: 2.208 kg Reset	Feed Conversion Rate	Temperature: 9.679 °C
User roles Persons	51	5.2	5.3	~			8.7			Fed yesterday: 5.046 kg	DOSING;	Oxygen: 12.617 mg/l
Reports Tanks	6	9	٢	9	es S	3	6-7	6-8		<u>FISH</u>	Dosing time: 180 s	ALARMS
										Fish amount: 25,478	Amount of Doses: 1	No Time To Feed
										Average weight: 84.97 g	Pause time: 01:14:49,00	Too Small Dose
										Biomass: 2,164.91 kg	Minimum pause: 1 s	Oxygen Alarm
			Powered b	× 🛌 😰					•	Mortality: 322 Reset	Test: 0 s	Group Interrupt

Arvo-Tec Oy



ARVOPRO – WEB BASED FEEDING SOFTWARE – REPORTING TOOLS AND DATALOGGING



Arvo-PRO has several reporting tools for the day to day runnings of a commercial fishery.

Day reports with each tanks details are generated daily for your convenience.

Separate feed reports showing today's feedings will help you manage your feed stores.

Weighing report tool is an additional simple 3-stage tool for record keeping.

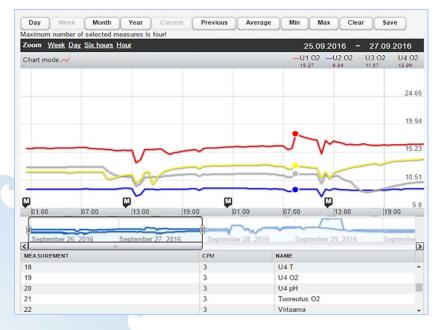
PDF or XLR format day- and feed reports.

Export data to 3rd party software easily.

ayrep	ort.pc	lf					1/1				Ċ	Ŧ	÷
<u> </u>			VDEDODT			0.00.04 (0	05.57						
		DA	Y REPORT	, genera	ted at 201	6-08-01 (0	05.57)						
Cu	Tank	Fish Name	Feed Name	Group	Fish (pcs)	Average (g)	Biomass (kg)	Fed (kg)	Fed total (kg)	Pred. Growth (kg)	O-Out (mg/l)	Water need (I/s)	(°C)
1	Ulko	Fish15	Fish feed	1	465	925,35	430,29	1,508	381,321	1,508	6,55	8,05	20,87
1	Eik	Ei käytössä	-	1	15000	0,00	0,00	0,000	0,000	0,000	6,85	0,00	20,87
1	Eik	Ei käytössä	-	1	15000	0,00	0,00	0,000	0,000	0,000	6,84	0,00	20,71
2	U1	-	-	-	75287	29,19	2197,76	40,763	923,344	-	0,00	18,25	18,08
2	U4	-	-		77262	31,67	2446,94	41,860	980,627	-	9,10	20,17	18,08
3	Uusi	Fish2		1	15000	0,00	0,00	0,000	0,000	0,000	10,00	0,00	18,25
3	Uusi	Fish4		1	15000	0,00	0,00	0,000	0,000	0,000	0,00	0,00	18,25
5	5-1	Fish1		1	17594	61,11	1075,18	10,324	805,865	12,905	13,43	9,59	18,22
5	5-3	Fish3		1	25485	58,87	1500,43	14,798	1038,262	18,497	13,39	13,50	18,22
5	6-6	Fish6		2	24951	64,11	1599,60	14,454	1116,307	18,068	9,68	23,28	18,81
5	6-7	Fish7		2	24282	53,83	1307,00	21,685	1014,935	27,106	9,68	23,93	18,81
5	6-8	Fish8		2	13791	55,80	769,57	12,733	685,552	15,916	9,74	13,97	18,81
6	Mitt	Fish1	Feed1	1	907	1814,38	1645,65	23,099	2046,910	23,099	6,47	45,55	20,71
6	Mitt	Fish2	Feed2	1	6000	24,61	147,66	3,720	4109,128	3,720	6,56	8,17	20,71
6	Mitt	Fish3		1	7000	2597,47	18182,26	158,067	19081,053	158,067	5,71	337,13	20,71
6	Mitt	Fish4	Feed4	1	7688	493,53	3794,29	43,405	3539,145	43,405	6,32	103,54	20,71
Total					340712		35096,63	386,416	35722,449			625,13	

Use the datalogging tool to track, compare and study all collected data like: power consumption, water usage, water quality changes and more to understand and improve your farms performance.

Keeping a complete log and being able to go back and compare data helps you understand what goes on on your farm over longer time periods.





ARVOPRO – WEB BASED FEEDING SOFTWARE – MEASUREMENTS AND ALARMS

Manually enter water temperature and oxygen level to start feeding or connect the desired probes for more accurate water quality and feeding control.

Set measurement warning and alarm levels. Clear OK-, Warning- and Alarm indicators.

Examples of supported measurements as connected probes:

Water Temperature, Co², pH, Oxygen, No², No³, Suspended solids, Turbidity, Flow etc...

Support for selected optical sensors*

Define alarms from any analog signal connected to the control unit. External alarms & on/off signal output.

Set individual alarm parameters for each control unit.

Multiple ways to set up alarms and alarm related behaviour for *groups and tanks*.

Keep a log of occured alarms and optionally send out GSM alarms.

Measurement	Info						
	trol Unit: 2	Name: Value:	U3 pH 6.46		ated: 9.2016 16:26:	50	
Param	neters:	L	owerLimit:		U	pperLi	mit:
	lue: 6.46	Louis	r limit type: Autom	atic 🔻			utomatic *
	ide. [_	
Measure Chan	nel: 7	Lower li	mit Status: In Use	•	Upper limit	status: O	off 🔻
Measure Ty	pe: Ph	·	ower limit: 5.5	;	Upp	er limit:	7.8
Dampti	ion: 1	Lower wa	arning limit: 6		Upper warnir	na limit:	7.5
				_			0
Measure Fac		Lower	limit delay: 0	s	Upper limi	delay:	0 s
Sca	ale: -3.5		Lower limit start tim	e:	Upp	per limit sta	art time:
Alarms						1-1 of 1	8 C P
Alarm logs	M M						
Control units		Hallihāly	Happi kupista	Alalinja	Ylälinja	i i	Tulovesi
Data logging		1 -0.00 °C	2 2.930 O	3 11.	02 *C 4	64.41 °C	5 10.43
Feeds							
Dosing units		Ulkolima	Meas8	Meas9	Meast		U1 02
External Alarms		6 13.23 °C	7 -0.00 °C	8 10	•• •	-0.00 °C	10 18.12
eeding formulas		U1 pH	U2 T	U2 O2	U2 pH		U3 02
eeding groups		11 6.670 PH	12 -74.8 °C		70 0 14	5.420 PH	15 10.13
Measurements	•						
User roles		U3 pH	Kyimið T	U4 T	U4 02		U4 pH
Persons		16 6.460 PH	17 17.62 °C	18 11.	25 °C 19	17.45 0	20 6.989
Reports Tanks			\smile				
anna		Tuoreutus O2	Virtaama	poisto T	Allasm		Tehonkulutus
		21 7.179 0	22 10.43 Q	23 14	39 °C 24	7.880 °C	25 88.62
		T R5	02 R5 27 13.01 0	pH R5	79 PH 29	10.22 °C	02 R6 30 13.01
Alarms						1-5 of 5 🖪	
Alarm logs	Controller Number	er	Name		Informati	on	
Control units Data logging	1		Alahalli				
Feeds	2		Tukiasema				
Dosing units	5		Uusi Halli Ryhmät 5-6				
External Alarms	6		Mittakone				
eeding formulas							
eeding groups	Uusi Halli (3)						
Measurements	Туре	Reason	Start time	End fir	ne/number		
Jser roles	Measure	19	18.09.2016 22:13:48	ALARI			
Persons	Measure	19	18.09.2016 21:38:02	ALAR			
Reports	Measure	19	12.08.2016 04:08:13	ALAR	M OFF		
Tanks	System alarm	Power down	28.08.2016 03:15:33	28.08.	2016 03:15:44		
	System alarm	Power down	28.08.2016 01:37:10		2016 01:37:15		
	System alarm	Power down	28.08.2016 00:01:29		2016 00:01:38		
	System alarm	Power down	27.08.2016 19:49:18	27.08.	2016 19:49:27		

Power down 27.08.2016 19:22:23 27.08.2016 19:22:31

26 08 2016 15:40:46

23.08.2016 10:27:21

System alarm

Power down

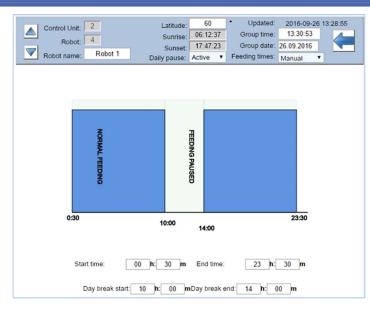
System alarm

26 08 2016 15:40:56

ALARM ON



ARVOPRO – WEB BASED FEEDING SOFTWARE – ADDITIONAL GROUP CONTROL



Adjust feeding levels with click of a mouse

Set feeding periods

Add pause times

Automatic start-stop times

Option to simulate sunrise & sunset

In addition to each tanks individual controls every control unit has 3 feeding groups.

Each feeding group has its own set of parameters and feeding times giving you control over several tanks at once.



Set alarms, Feeding stops, External alarms, Light control and Group measurements.

Control Unit: 3 Group: 2 Group Name: Individual group 2	Sunrise: 02:46:32 Grou	odated: 26.09.2016 13:15:30 p time: 17:19:44 p date: 29.06.1981 g times: Manual V
1.MEAS. FEEDING STOP	LIGHT CONTROL	EXTERNAL STOP
Measure number: Hallihäly v	Start: 08:00	External 1: On 🔻
Limit: Lower limit •	End: 16:00	External 2: Off V
In Use: Off 🔻	Diff. feeding start: 00:00	External 3: Off V
	Diff. feeding end: 00:00	External 4: Off V
2.MEAS. FEEDING STOP	Fading time: 00:01	External 5: Off V
Measure number: Hallihäly v	Light level: 1	
Limit: Lower limit •	Min-max time: 60 s	FEEDING
In Use: Off •	Pulse: 1 s	Measure stop 1: External stop 1:
	TEMPERATURE	Measure stop 2: External stop 2:
3.MEAS. FEEDING STOP	Measure number: Kylmiö T 🔻	Measure stop 3: External stop 3:
Measure number: Hallihäly	OXYGEN	External stop 4:
Limit: Lower limit V		External stop 5:
In Use: Off V	Measure number: U1 O2 V	



ARVO-TEC PROFESSIONAL FEEDING CONTROL SYSTEM

ARVO-TEC PROFESSIONAL CONTROLLER - WOLF



The Arvo-Tec control unit WOLF is a fully integrated feeding, measurement, light control (photo period) and alarm system.

The system uses environmental parameters like water temperature, oxygen content and biomass as initial data and controls feeding according to mathematical energy demand model.

The system estimates fish growth based on the feed conversion factor. There are a number of fish species available as pre-programmed options and level of feeding can be adjusted as needed manually. Pre-set feeding formulas for several fish species.

Control the day/night cycle of through photo period control. Inbuilt generator controls & optional battery for barge based operation. Menu driven display in control unit or an optional MS Windows based PC-connection with web-based software.

Arvo-Tec controller is cased in stainless steel cabinet for extreme conditions.

TECHNICAL SPECIFICATIONS

- 115 OR 240 VAC
- 8,16,24 OR 32 INDEPENDENT FEEDER CHANNELS PER CONTROL UNIT
- MAXIMUM 30 CONTROL UNITS IN ONE SYSTEM
 = 960 CHANNELS
- CABLE, RADIO, TCP/IP AND MOBILE COMMUNICATION OPTIONS
- 8 MEASUREMENT INPUTS PER CONTROL UNIT
- 5 DIGITAL SENSOR INPUTS (E.G. LEVEL SWITCH CIRCUITS)
- 2 ALARM/CONTROL OUTPUTS PER CONTROL UNITS
- OPTIONAL MS WINDOWS BASED PC-CONNECTION





ARVO-TEC PROFESSIONAL CONTR	OLLER - WOLF	
NAME	CODE	ADDITIONAL INFO
WOLF8-ChannelWOLF16-ChannelWOLF24-ChannelWOLF32-Channel	3501 3502 3503 3504	 Ready standalone versions for 8,16,24 or 32 feeders Link up to 30 controllers for a maximum of 960 feeders Wired or Radio communication options Standalone or with PC connection Wired PC connection requires Converter and Surge Protection Board AISI 316 Stainless steel cabinet More channels can be added later by adding relay boards
Industrial multitouch panel PC with web based ArvoPRO software	3702	 Intel© Celeron? J1900 2.0GHz Panel PC 12.1" LED 1024*768 with 5-wire resistive touch screen RAM 4GB DDR3L SODIMM SSD 120GB SATA WLAN PCIe mini-card, Intel Wireless-N 7260 Half min WIN 10 PRO ENG 64-BIT Standard communication: twisted pair RS-485 cable up to 1 km Wired PC connection requires serial converter and surge protection board

Optional: Low power radio link for PC communication up to 200m

•====

6



ARVO-TEC PRO	FESSIONAL CONTROL	LER – WOLF			
NAME		CODE		ADDITIONAL INFO	
Overvoltage proto ARINT	ection board	3602	•	Provides necessary overvoltage protection for communication betwe PC and controllers	en
Converter RS 485	i-232	3700	•	Extend the distance between PC and control unit up to 10 km	
Transforder			•	Add converter & ARINT-board for controller-PC communication	
ARSER I/O board		3603	•	Necessary for expansion with relay b Includes necessary control cable	oard
Relay board 8-cha	annel	3710	•	Adds further 8 channels to your controller, up to 32	
			•	Add ARSER with each expansion relay board	/
	O-TEC PROFESSIONAL C				
Code 3501 WOLF 8-	Description	1	Ad	ditional info.	
	G-channel				
	I-channel				
	2-channel				
	PC connection & softwa	are	Wi	in 10 web based	
			-		

- 3602 Overvoltage protection board ARINT
- 3700 Converter RS 485-232
- 3603 ARSER I/O board
- 3710 Relay board 8-channel
- 3701 Import-export extension for web based software

For communication

For communication

Necessary with expansion relay board

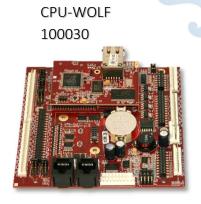
Add ARSER for expansion relay board



CONTROLLER-SPARES AND ACCESSORIES

ARIF-WOLF Motherboard 140014





Memory backup battery CR2477N 3714

Power supply 24 VDC 2,5A

101001



Power supply 24 VDC 4,2A

101002



	CONTROLLER SPARES AND	ACCESSORIES
Code	Description	Additional info.
140014	ARIF-WOLF Motherboard	Connection board
100030	CPU-WOLF	
3714	Memory backup battery	CR2477N
101001	Power Supply 24 VDC 2,5 A	Input AC 100-240v
101002	Power Supply 24 VDC 4,2 A	Input AC 100-240v



TIMER	CONTROL		
NAME		CODE	ADDITIONAL INFO
	trol - 3 Channel 24 VDC	3560	 Suitable for battery operated system Up to 3 feeders
Timer Con	trol - 4 Channel	3561	 Simple PLC based timer control for up to 8 feeders
Timer Cont	trol - 8 Channel	3562	
			 Set feeding start & stop times
6			 Set the duration of pulse and pause time
arvoid			 Can be used with pneumatic spreader
Carbon and A			 115 VAC version on request
			ΕΓΓΟΝΤΓΩΟΙ
Code		ARVO-TEC TIM	ER CONTROL Additional info.
3560	Timer control for 3 output		Battery not included
3561	Timer control for 4 output		
3562	Timer control for 8 output		



ITEM LIST

CodeDescriptionAdditional info.3501WOLF 8-channel3502WOLF 16-channel3503WOLF 24-channel3504WOLF 32-channel3702Arvo-Tec PC connection & softwareArvoPro, win 10, web based3602Overvoltage protection board ARINTFor communications3703Converter RS 485Includes USB to serial converter3603ARSER I/O boardNecessary with expansion relay board3710Relay board 8-channelAdd ARSER for expansion relay board3711Relay board 8-channelAdd ARSER for expansion relay board3704 TONTROLLER SPARES AND ACCESSORIES CodeDescriptionAdditional info.140014140014ARIF-WOLF Motherboard100030CPU-WOLF3714Memory backup batteryCR2477NInput AC 100-240v101001Power Supply 24 VDC 2,5 AInput AC 100-240v101002Power Supply 24 VDC 4,2 AInput AC 100-240v101003CPU-WOLFInput AC 100-240v3560Timer control for 3 output – 24 VDCBattery not included3561Timer control for 4 output35623562Timer control for 8 outputInput AC		ARVO-TEC PROFESSIONAL CONTROLLER - WOLF / ARVO-TEC PC CONNECTION				
3502WOLF 16-channel3503WOLF 24-channel3504WOLF 32-channel3702Arvo-Tec PC connection & softwareArvoPro, win 10, web based3602Overvoltage protection board ARINTFor communications3703Converter RS 485Includes USB to serial converter3603ARSER I/O boardNecessary with expansion relay board3710Relay board 8-channelAdd ARSER for expansion relay board3701Import export extension for web based softwareAs standardCONTROLLER SPARES AND ACCESSORIESCodeDescriptionAdditional info.140014ARIF-WOLF MotherboardConnection board100030CPU-WOLFT3714Memory backup batteryCR2477N101001Power Supply 24 VDC 2,5 AInput AC 100-240v101002Power Supply 24 VDC 4,2 AInput AC 100-240v101002DescriptionAdditional info.ARVO-TEC TIMER CONTROLCodeDescriptionAdditional info.3560Timer control for 3 output – 24 VDC3560Timer control for 4 output		Code	Description	Additional info.		
3503WOLF 24-channel3504WOLF 32-channel3702Arvo-Tec PC connection & softwareArvoPro, win 10, web based3602Overvoltage protection board ARINTFor communications3703Converter RS 485Includes USB to serial converter3603ARSER I/O boardNecessary with expansion relay board3710Relay board 8-channelAdd ARSER for expansion relay board3701Import export extension for web based software CONTROLLER SPARES AND ACCESSORIESCodeDescriptionAdditional info.140014ARIF-WOLF Motherboard100030CPU-WOLF3714Memory backup batteryCR2477N101001Power Supply 24 VDC 2,5 A101002Power Supply 24 VDC 4,2 A101003Input AC 100-240v101004DescriptionAdditional info.3560Timer control for 3 output – 24 VDC3561Timer control for 4 output		3501	WOLF 8-channel			
3504WOLF 32-channel3702Arvo-Tec PC connection & softwareArvoPro, win 10, web based3602Overvoltage protection board ARINTFor communications3703Converter RS 485Includes USB to serial converter3603ARSER I/O boardNecessary with expansion relay board3710Relay board 8-channelAdd ARSER for expansion relay board3701mport export extension for web based softwareAs standardCONTROLLER SPARES AND ACCESSORIESCodeDescriptionAdditional info.140014ARIF-WOLF MotherboardConnection board100030CPU-WOLFTop Yac Supply 24 VDC 2,5 AInput AC 100-240v101001Power Supply 24 VDC 4,2 AInput AC 100-240v101002Power Supply 24 VDC 4,2 AInput AC 100-240v101003CodeDescriptionAdditional info.Advo-TEC TIMER CONTROLCodeDescriptionAdditional info.3714Memory backup batteryCR2477N101001Power Supply 24 VDC 4,2 AInput AC 100-240vInput AC 100-240vCodeDescriptionAdditional info.3560Timer control for 3 output – 24 VDCBattery not included3561Timer control for 4 outputTop Yac		3502	WOLF 16-channel			
3702Arvo-Tec PC connection & softwareArvoPro, win 10, web based3602Overvoltage protection board ARINTFor communications3703Converter RS 485Includes USB to serial converter3603ARSER I/O boardNecessary with expansion relay board3710Relay board 8-channelAdd ARSER for expansion relay board3701Import export extension for web based softwareAs standardCONTROLLER SPARES AND ACCESSORIESCodeDescriptionAdditional info.140014ARIF-WOLF MotherboardConnection board100030CPU-WOLFInput AC 100-240v101001Power Supply 24 VDC 2,5 AInput AC 100-240v101002Power Supply 24 VDC 4,2 AInput AC 100-240v101002DescriptionAdditional info.3560Timer control for 3 output – 24 VDCBattery not included3561Timer control for 4 outputStattery not included		3503	WOLF 24-channel			
3602Overvoltage protection board ARINTFor communications3703Converter RS 485Includes USB to serial converter3603ARSER I/O boardNecessary with expansion relay board3710Relay board 8-channelAdd ARSER for expansion relay board3701Import export extension for web based softwareAs standard3702CONTROLLER SPARES AND ACCESSORIESCodeDescriptionAdditional info.140014ARIF-WOLF MotherboardConnection board100030CPU-WOLF3714Memory backup batteryCR2477N101001Power Supply 24 VDC 2,5 AInput AC 100-240v101002Power Supply 24 VDC 4,2 AInput AC 100-240v101002DescriptionAdditional info.3560Timer control for 3 output – 24 VDCBattery not included3561Timer control for 4 output		3504	WOLF 32-channel			
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3561 Timer control for 4 output		Code	· ·			
			•	Battery not included		
3562 Timer control for 8 output			•			
		3562	Timer control for 8 output			