



ARVO-TEC OY

Control System 2016



ARVO-TEC SYSTEM

FEEDING PROCESS MANAGEMENT VIA WEB BASED INTERFACE

ALL INFORMATION IN ONE DATABASE WITH DATALOGGING

REMOTE ACCESS FROM ANYWHERE (VPN REQUIRED)

ACCESS YOUR SYSTEM ONLINE



ALARMS VIA
GSM
(OPTIONAL)



CONTROLLERS FOR
MEASUREMENTS, LIGHT
CONTROL AND ALARMS



Master



Slave



Slave

UP TO 30 CONTROL UNITS

CABLE, RADIO OR LAN COMMUNICATION



PIPE FEEDING AS SEPARATE
SYSTEM

INDIVIDUAL FEEDERS AND ROBOT
FEEDING WORK SEPARATELY OR CAN
BE COMBINED INTO ONE SYSTEM



EACH CONTROLLER
HAS 8 ANALOG
AND 5 DIGITAL
INPUTS FOR YOUR
MEASUREMENTS
AND DEVICES.
MORE ACCURATE
FEEDING AND
IMPROVED WATER
QUALITY





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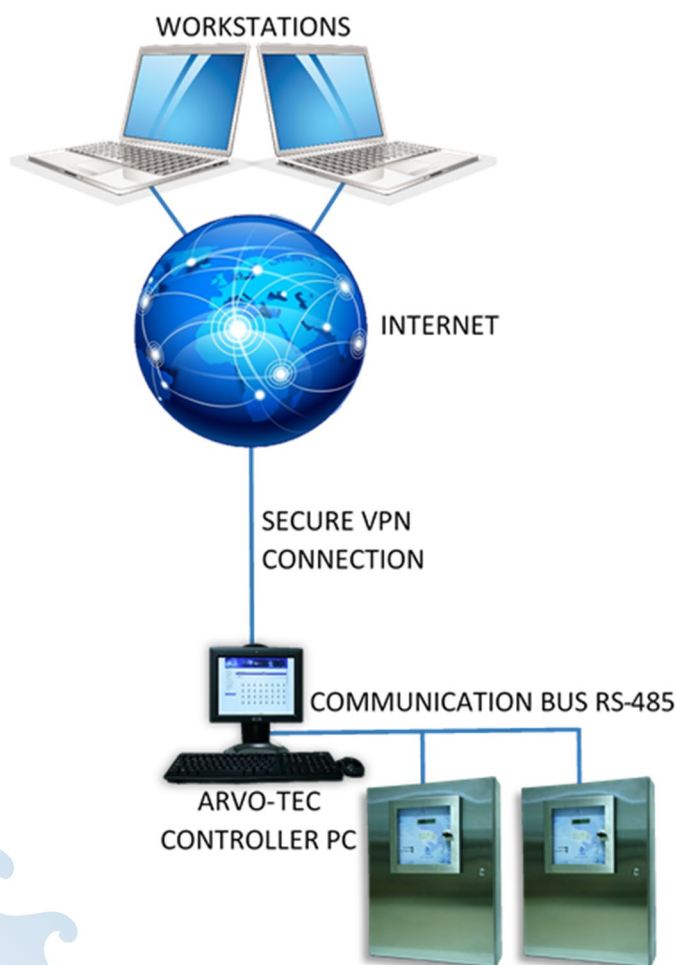
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ARVO-TEC WEB BASED FEEDING SOFTWARE & PC USER INTERFACE



Adding the optional PC connection and web based software to Arvo-Tec feeding system gives access to clear, easy to use graphical interface with optimized functions for modern aquaculture.

System is accessible from anywhere using VPN-secured connection, enabling online water quality - and feeding monitoring and On-Line support from Arvo-Tec service team.

Controller PC works as a centralised user interface to the system enabling control of all controller units and tanks from one point.

Information can be exported via export/import extension in comma separated values, to be used by 3rd party applications e.g. Excel, Fishtalk

VPN-Service not provided by Arvo-Tec. Consult an IT-Professional for details.



Measurements View



Feeding Periods



Datalog View



Tank View

ARVO-TEC PROFESSIONAL FEEDING CONTROL SYSTEM

ARVO-TEC PROFESSIONAL CONTROLLER – WOLF



The Arvo-Tec control system 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. Easy to use system with 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.

Below: Example of possible monitored environmental parameters

OPTICAL OXYGEN AS OPTIONAL



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 CONTROLLER - WOLF

NAME	CODE	ADDITIONAL INFO
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WOLF	8-Channel	3501
WOLF	16-Channel	3502
WOLF	24-Channel	3503
WOLF	32-Channel	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 Panel PC with Arvo-Tec web based feeding software	3702
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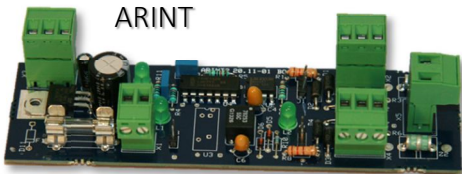

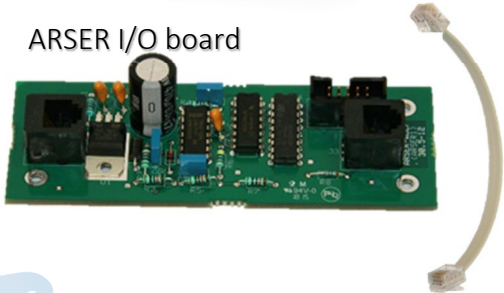
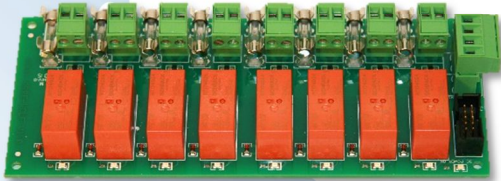


- Factory installed ArvoCOM & ArvoPRO software
- 12" touch screen, wireless keyboard and mouse, Windows 7 32-bit (English) & Wireless LAN
- Standard communication: twisted pair RS-485 cable up to 1 km
 - Wired PC connection requires Converter and Surge Protection Board
 - Optional: Low power radio link for PC communication up to 200m

Import-Export extension for web based software	3701
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- Exports & imports data in comma separated values-form
- Create backup of controller values

ARVO-TEC PROFESSIONAL CONTROLLER – WOLF

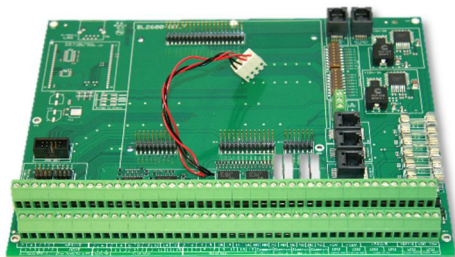
NAME	CODE	ADDITIONAL INFO
Overvoltage protection board ARINT 	3602	<ul style="list-style-type: none"> Provides necessary overvoltage protection for communication between PC and controllers
Converter RS 485 	3703	<ul style="list-style-type: none"> USB to Serial converter included
ARSER I/O board 	3603	<ul style="list-style-type: none"> Necessary for expansion with relay board Includes necessary communication cable
Relay board 8-channel 	3710	<ul style="list-style-type: none"> Adds further 8 channels to your controller, up to 32 Add ARSER with each expansion relay board

ARVO-TEC PROFESSIONAL CONTROLLER - WOLF / ARVO-TEC PC CONNECTION

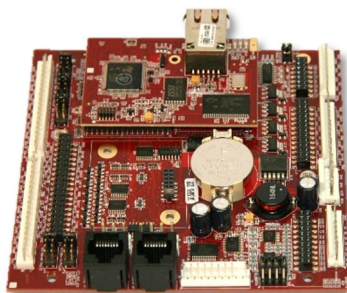
Code	Description	Additional info.
3501	WOLF 8-channel	
3502	WOLF 16-channel	
3503	WOLF 24-channel	
3504	WOLF 32-channel	
3702	Arvo-Tec PC connection & software	
3602	Overvoltage protection board ARINT	For communications
3703	Converter RS 485	Includes USB to serial converter
3603	ARSER I/O board	Necessary with expansion relay board
3710	Relay board 8-channel	Add ARSER for expansion relay board
3701	Import-export extension for web based software	

CONTROLLER-SPARES AND ACCESSORIES

ARIF-WOLF Motherboard
140014



CPU-WOLF
100030



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
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Timer Control - 3 Channel 24 VDC	3560	
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- Suitable for battery operated system
- Up to 3 feeders
- Code does not include battery

Timer Control - 4 Channel	3561	
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Timer Control - 8 Channel	3562	
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- Simple PLC based timer control for up to 8 feeders
- Set feeding start & stop times
- Set the duration of pulse and pause time (seconds)
- Can be used with pneumatic spreader
- 115 VAC version on request



ARVO-TEC TIMER CONTROL

Code	Description	Additional info.
3560	Timer control for 3 output – 24 VDC	Battery not included
3561	Timer control for 4 output	
3562	Timer control for 8 output	

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ARVO-TEC PROFESSIONAL CONTROLLER - WOLF / ARVO-TEC PC CONNECTION

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