OTT HydroMet

ADCON

ADCON is a brand of OTT HydroMet

ADCON Series 6 RTU

NEXT GENERATION ULTRA LOW POWER DATALOGGER

The ADCON Series 6 RTU is the new generation of remote-controlled, ultra low-power dataloggers for agricultural, meteorological and hydrological applications at a competitive price. The series distinguishes from its predecessors by a self-monitoring battery, a larger memory for up to 2 million values and a wireless data transfer via Bluetooth. Further advantages are the possible data encryption to ensure data safety, the comfortable firmware update over the air as well as the future-proof design to be integrated in IoT networks and connected to state-of-the-art communication technologies.

The ADCON Series 6 RTU includes three different models: the A760 Cell, the A764 Cell and the A765 Cell. They have different connectors as well as I/O ports and are available as 3G, 4G and LTE versions. With their 32-bit-CPU, they deliver the data fast and reliably.

Together with the ADCON addVANTAGE Pro software the models of the ADCON Series 6 RTU form a complete solutions for your monitoring tasks.

ADVANTAGES

- Fast, reliable and long-term operation due to 32-bit-CPU and IP65 or IP67 classified housing
- Extremely low power consumption
- Large memory for up to 2 million values
- Comfortable and flexible remote control, maintenance and sensor analysis possible leading to a low total cost of ownership
- Improved network management due to the possibilty to perform firmware updates over the air
- Smart, self-monitoring battery function informing on the current battery status
- Together with the addVANTAGE Pro it forms an integrated system solution
- Easy and intuitive local operation by wireless communication via Bluetooth
- Attractive price-performance ratio
- Secure, encrypted data transmission if required
- Backward compatibility of sensors and accessories due to same connector concept than predecessors

APPLICATIONS

- Allround-RTU, extremely compact, extremely rugged, extremely low-power
- WMO-compliant weather recording
- Agriculture & public water supply
- Flood warning, dam monitoring
- Science, research & development, and much more

SPECIFICATIONS

Model	A760 Cell	A764 Cell	A765 Cell
Dimensions	160 x 60 x 80 mm		
Weight	Approx. 1200 g		
IP class	IP65 & IP67		
Temperature range	-30 °C to +65 °C		
Case	Powder-coated aluminum		
Connectors (all connectors IP67 if properly mated or capped)	3x Binder M9 7-pin to sensors (A, B, D)	4x Binder M9 7-pin to sensors (A, B, C, D)	2x Binder M9 7-pin to sensors (A, D)
	1x Binder M9 5-pin to solar cell/power supply	1x Binder M9 5-pin to solar cell/power supply	1x Binder M9 5-pin to solar cell/power supply
	1x TNC Antenna connector	1x TNC Antenna connector	1x TNC Antenna connector
Power supply	6.0 V NiMH battery 3300 mAh with solar cell or mains adapter		
I/O Ports	9x analog in (0 to 2.5 VDC)	12x analog in (0 to 2.5 VDC)	
	3x pulse counter	4x pulse counter	2 x pulse counter
	3x digital in/out (0 to 5 V TTL)	4x digital in/out (0 to 5 V TTL)	2 x digital in/out (0 to 5 V TTL)
	40x SDI-12 values	40x SDI-12 values	40 x SDI-12 values
Resolution	Analog: 12-Bit @ 0 to 2.5 V	Analog: 16-Bit @ 0 to 2.5 V	Analog: None
Counter inputs	3x Configurable per I/O: Slow: 30 Hz | Fast: 500 Hz	4x Configurable per I/O: Slow: 30 Hz | Fast: 500 Hz	2x Configurable per I/O: Slow: 30 Hz | Fast: 500 Hz
Sensor excitation	Unregulated batt. 5.6 to 7.2 V		
Sampling interval	User specific (from 10 s to 12 h)		
Internal memory	16 MB (typ. 2,000,000 values)		
Internal sensors	Temperature	Temperature & Humidity	Temperature & Humidity
Wind Gust Measurement capability	No	Yes (C only)	No
Rain Gauge Event capability	Yes		
Digital events	Yes		
I/O Current consumption measurement	No	Yes	Yes
Operating time (without charging of internal battery)	In standard mode up to 14 days, in power-save mode up to 6 months, depends on slot time, transmission rate and sensors		

UMTS Version	
UMTS bands	800, 850, 900, 1900, 2100 MHz
GSM bands	Quad-Band
UMTS Rx Sensitivity	-109 to -111 dBm (depends on band)

LTE Version			
LTE information	LTE Cat M1/NB1		
Tx Output Power	21 to 33 dBm depending on network		
SIM form factor	Mini SIM (2FF)		
Antenna	Omni-directional, 2G/3G/4G, 2 dBi		
Bluetooth module	No	Yes (Bluetooth Low Energy 5)	Yes (Bluetooth Low Energy 5)
FOTA	Yes		
Expansion (optional)	No	- Modbus interface via RS-485/RS-232 - External digi-I/O Box A553	- Modbus interface via RS-485/RS-232 - External digi-I/O Box A553
Type Approvals	RED, FCC, IC, PTCRB		

Order information			
3G Version	A100760000	A100764000	A100765000
LTE Version	A100760001	A100764001	A100765001

Accessories			
Power supply - Solar panel (9 V / 540 mA)	A200733522		
Power supply - Mains power adapter	EU: A200720522 US: A200720523 UK: A200720524 AUS: A200720525		
Power supply - A922 Power adapter	A200733922		
Spare battery + gasket	A800000275	-	-
Spare smart battery + gasket	-	A800000276	A800000276
RTU Communication cable USB	A200720542		
A514 Modbus Interface	-	A800514001	A800514001
A553 Digital I/O Expansion	-	A200733553	A200733553