Technical Data
ADCON SERIES 6 RTU

ADCON new ultra low power RTU A760, A765 and A764

- **Device type**
  Compact data logger with integrated cell modem

- **Product highlights**
  ultra-low-power design; large integrated memory; IP-67/IP-65; WMO-compliant weather recording; Bluetooth; Firmware update over the air feature (FOTA)

- **Data transmission**
  2G/3G or 4G/LTE

- **Sensor interfaces**
  A764: 12x analog in (0 ... 2,5 VDC); 4x pulse counter￼4x digital in/out (0 ... 3 V TTL); 40x SDI-12 values; Analog resolution: 16-Bit @ 0 ... 2,5 V

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 differentiates from its predecessors by a self-monitoring battery, a larger memory for up to 2 million values and wireless communication via Bluetooth.

Further advantages are the data encryption option to ensure data safety, the convenient firmware update over the air as well as the future-proof design for integration in IoT networks and existing state-of-the-art communication technologies.

The ADCON SERIES 6 RTU is available as 2G/3G or 4G/LTE version and is equipped with a fast 32-bit-CPU.

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ADCON SERIES 6 RTU

Dimensions	160 x 60 x 80 mm
Weight	approx. 1 200 g
IP class	IP 65 & IP 67
Breathing vent	Type: A760 : yes Type: A764: yes Type: A765: yes
Temperature Range	-30 to +65 °C
Case	powder-coated aluminum
Screw connections	flange sockets of nickel-plated brass, stainless steel cover
Connectors (all connectors IP67 if properly mated or capped)	Type: A760 : 3 x Binder M9 7-pin to sensors (A, B, D) Type: A764: 4 x Binder M9 7-pin to sensors (A, B, C, D) Type: A765: 2 x Binder M9 7-pin to sensors (A, D) 1 x Binder M9 5-pin to solar cell / power supply 1 x TNC Antenna connector
Power supply	- 6.0 V NiMH battery 3 300 mAh - solar cell or mains adapter

.	Type A760
I/O Ports	9 x analog in (0 tp 2.5 VDC) 3 x pulse counter 3 x digital in/out (0 to 5 V TTL) 40 x SDI-12 values
Resolution	Analog: 12-Bit @ 0 to 2.5 V
Counter inputs	3x Configurable per I/O: Slow: 30 Hz Fast: 500 Hz
Min/Max operations for analog sensors	yes
Wind Gust Measurement capability	no
Rain Gauge Event capability	yes
Digital events	yes
I/O Current consumption measurement	no

.	Type A764
I/O Ports	12x analog in (0 to 2.5 VDC) 4 x pulse counter 4 x digital in/out (0 to 5 V TTL) 40 x SDI-12 values
Resolution	Analog: 16-Bit @ 0 to 2.5 V
Counter inputs	4x Configurable per I/O: Slow: 30 Hz Fast: 500 Hz
Min/Max operations for analog sensors	yes

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Wind Gust Measurement capability	yes (C only)
Rain Gauge Event capability	yes
Digital events	yes
I/O Current consumption measurement	yes

.	Type A765
I/O Ports	2 x pulse counter 2 x digital in/out (0 to 5 V TTL) 40 x SDI-12 values
Resolution	Analog: None
Counter inputs	2x Configurable per I/O: Slow: 30 Hz Fast: 500 Hz
Min/Max operations for analog sensors	yes
Wind Gust Measurement capability	no
Rain Gauge Event capability	yes
Digital events	yes
I/O Current consumption measurement	yes

.	All
Sensor excitation	unregulated batt. 5.6 to 7.2 V
Sampling interval	user specific (from 10 s to 12 h)
Measuring method	parallel & sequential
Internal memory	16 MB (typ. 2,000,000 values)
Internal sensors	Temperature
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 LTE bands: 2, 3, 4, 5, 8, 12, 13, 20, 28
LTE Rx Sensitivity	- Cat M1: -105 to -107.5 dBm (depends on band) - Cat NB1: -112 to -114 dbm (depends on band)
Tx Output Power	21 to 33 dBm depending on network
Transmission distance	Network dependent
SIM form factor	Mini SIM (2FF)

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Antenna	omni-directional, 2G/3G/4G, 2 dBi
Bluetooth module	Type: A760 : no Type: A764: yes (Bluetooth Low Energy 5) Type: A765: yes (Bluetooth Low Energy 5)
FOTA	yes
Expansion (optional)	Type: A760 : no Type: A764: yes - Modbus interface via RS-485/RS-232, external digi-I/O Box A553 Type: A765: yes - Modbus interface via RS-485/RS-232, external digi-I/O Box A553
Type Approvals	RED, FCC, IC, PTCRB